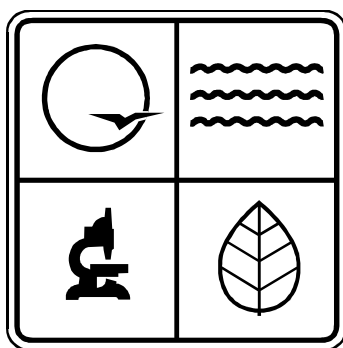


MISSOURI
WATER QUALITY REPORT
(SECTION 305(b) REPORT)

2008

MISSOURI DEPARTMENT OF NATURAL RESOURCES



WATER PROTECTION PROGRAM

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CHAPTER 1. EXECUTIVE SUMMARY

The Missouri Water Quality Report is published every two years. The report summarizes water quality issues and judges the degree of progress Missouri has made toward meeting Federal Clean Water Act goals. The water quality assessments made in this report will help direct future water quality management efforts to those waters most in need of restoration or protection.

WATER RESOURCES AND PROBLEMS

Missouri has an area of 69,000 square miles and a population of 5.6 million people, according to the 2000 census. About half of the population is concentrated on opposite sides of the state in the Kansas City and St. Louis metro areas, leaving most of the state and its waters rural in nature. Surface and groundwater in Missouri are quite varied in quantity and quality, corresponding closely with geology and land use.

Northern and Western Missouri

Northern and western Missouri, originally prairie land, are now used primarily for crop and livestock production and are underlain by bedrock containing several relatively impermeable shale and clay layers. Surface waters are more turbid and are greatly affected by high rates of sediment deposition. These deposits, caused by soil erosion, result in poor aquatic habitat due to the fine, unstable materials of stream bottoms. Up to 8,000 miles of classified streams may be affected by these processes or other types of degradation of aquatic habitat, such as flow modification or channelization.

Rivers and reservoirs used as drinking water supplies often contain herbicides. In the recent past, several reservoirs that served as public drinking reservoirs exceeded drinking water standards for atrazine or health advisory levels for cyanazine. Currently, however, there are no actively used drinking water reservoirs for which atrazine or cyanazine exceed these levels. This is due in part to local watershed management programs aimed at reducing herbicide runoff. Several other herbicides are occasionally found in drinking water reservoirs, also at concentrations below health advisory levels.

The quality of groundwater in northern and western Missouri is also influenced by the geology of the area. Public water supply sources include reservoirs and wells. The wells obtain water primarily from glacial drift deposits in portions of north-central and western Missouri. Wells in western Missouri, south of Kansas City, obtain water from limestone aquifers except for the extreme western limits of Missouri near the state border with Kansas. Private water supplies are obtained from glacial drift deposits and from underlying limestone bedrock in portions of northwestern, central, eastern and northeastern Missouri. However, deep bedrock wells in many north-central and northwestern Missouri locations tap water supplies too mineralized for drinking water purposes. About one-quarter of private wells in this portion of Missouri exceed the drinking water standard for nitrate and about two percent exceed drinking water standards for pesticides. This contamination is often caused by localized surface contamination of the wellhead and does not represent widespread contamination of the underground aquifer. Deeper aquifers are well protected from surface contamination by impermeable strata.

The Ozark Plateau

The Ozark Plateau, including the Springfield Plateau, is predominantly hilly topography. There are some very rugged portions as well as significant areas of gentle to almost flat landscape. The bedrock, consisting of limestone, dolomite and sandstone, yields groundwater of excellent quality generally requiring no treatment and adequate in supply for most urban, industrial and other needs. The soil or subsoil has developed by weathering from the bedrock formations and is generally 20 to 80 feet thick.

Some areas have extremely thin soils and other locations where weathering has been extensive have a thickness of 100 feet and more. The subsoil has moderate to high infiltration rates, which contribute to the recharge of groundwater supplies. Ozark streams are generally clear with baseflows well sustained by many seeps and springs. Some streams and reservoirs in the Ozarks are becoming nutrient and algae enriched due to increasing

human population and domestic animal production in their watersheds.

Groundwater contamination risks are moderate to high due to the permeability of the soil and bedrock. Any number of surface activities, including agricultural and suburban-urban storm water and wastewater disposal, mining, storm water runoff, lawn care, improper well construction or closure, and individual on-site wastewater disposal practices, pose threats to surface water and groundwater quality. However, overall water quality remains good in large part due to the efforts of all parties to protect the aquifers.

Groundwater is relied upon heavily for drinking water supply in this part of Missouri. Most municipalities in the southern half of the state rely on groundwater for drinking water supply. The number of private drinking water wells statewide is not known, but is probably between 100,000 and 250,000, mostly south of the Missouri River. The major groundwater concern is the often rapid and unfiltered transmission of contaminated surface runoff or leachate from some septic tanks, underground storage tanks, landfills, dumps, and liquid waste storage ponds, and animal production or processing wastes through fractures or sinkholes directly into potable aquifers. Properly cased wells into deep aquifers rarely encounter water quality problems, but shallow or improperly cased wells are at risk.

In the Joplin area, the shallow bedrock aquifer has elevated levels of sulfate and several heavy metals due to mineralization of groundwater in flooded mines. Some private wells in this area exceed drinking water standards for lead or cadmium. Localized contamination of shallow private wells due to leaks, spills and improper disposal of industrial or commercial chemicals occurs in the larger metro areas of Springfield and Joplin.

The Mississippi Embayment

Missouri's southeastern corner is a large alluvial plain of the Mississippi River. Originally a vast system of wetlands, it has been drained and almost entirely converted to crop production. Almost all surface waters in the area are drainage ditches and may not attain beneficial uses because of degradation of aquatic habitat due to channelization. Channelization creates a homogenous, low quality aquatic habitat. Sloughing of the channel banks, which fills the channel bottoms, buries better habitat, and leaves unstable substrate, is a problem.

Groundwater is abundant due to high infiltration rates on these flat fields. Public water supplies that tap deeper aquifers provide good quality water, but shallow private wells commonly have nitrates and low levels of pesticides. The frequency of exceedence of drinking water standards for nitrates and pesticides in private wells is similar to northern Missouri, about 18 percent and two percent, respectively.

Alluvial Aquifers

The remaining major aquifer is the alluvial aquifer system of the major rivers of the state. In northern Missouri, where surface and deep aquifer supplies are unreliable, many towns depend on the alluvial aquifer of a large nearby stream. Landfills and industrial land use in Kansas City and St. Louis have historically been located on river floodplains and have caused local contamination of the Mississippi, Missouri and Meramec river aquifers in St. Louis and the Missouri River aquifer in Kansas City. Some municipal water supplies have been affected.

WATER POLLUTION CONTROL ACTIVITIES

Authority for enforcement of the Missouri Clean Water Law and for state regulations concerning water pollution resides with the Department of Natural Resources' Water Protection Program. Authority for the regulation of pesticide application rests with the Missouri Department of Agriculture. A permit from the Department of Natural Resources is not normally required to apply pesticides.

Point Source Controls

In order to legally discharge pollutants to waterways in Missouri, a party must obtain a National Pollutant Discharge Elimination System (NPDES) permit from the Department of Natural Resources. This permit sets limits on the amounts of certain pollutants that can be discharged. It may also set requirements for monitoring the effluent or the receiving stream.

The number of miles of classified streams judged to be impaired by point source wastewater discharges is similar to the estimate from 1984, when statewide data on stream quality first became available. In 1984, 105 miles of classified stream were judged to be impaired by domestic or industrial wastewater. Domestic and industrial discharges include wastewater from cities, subdivisions, apartment complexes, mobile home parks, businesses and industries. Stream miles impaired by point source discharges in more recent years were 93 miles in 2000, 104 miles in 2002, 101 miles in 2004, 83 miles in 2006, and 70 miles in 2008. The decrease in impaired mileage during the recent reporting cycles may be due in part to evolving data requirements and analytical methods, as prescribed by Missouri's 303(d) Listing Methodology.

Hog and poultry production in concentrated animal feeding operations (CAFOs) are now major agri-businesses in Missouri. The large amount of animal waste generated at these facilities requires proper management to prevent water pollution. CAFOs are incorporated into the point source permit program, consistent with federal requirements.

Concern over eutrophication of large, recreationally important reservoirs led to changes in the state regulations for discharges of wastewater. These regulations impose phosphorus concentration limits on most wastewater discharges in the Table Rock Reservoir and Lake Taneycomo watersheds. These limits may be further affected when numeric nutrient criteria for lakes are implemented in the near future.

Nonpoint Source Controls

In recent years, several different types of nonpoint sources of pollution have come under regulatory control through a permitting process. Regulations are in place to prevent leakage from underground storage tanks and for the secondary containment of bulk agricultural chemical storage sites. Large sand and gravel mining operations require a general permit for storm water and smaller operations have been provided with guidelines for best management practices (BMPs), in addition to the 404 permit required of all sand and gravel operations. Storm water runoff discharge permits are issued for construction sites and other areas with more than one acre of bared ground. About 50 percent of all permits now issued by the Water Pollution Control Branch are storm water permits on land disturbance activities. Active mining areas that discharge water must operate under permits, although many abandoned mine lands still rely on voluntary controls. Many cities and large towns must now obtain storm water permits in order to manage pollution due to urban runoff.

Control of many agricultural nonpoint sources, such as erosion from cropland and pasture, or runoff of fertilizer, pesticides and animal waste, are addressed by Missouri's voluntary nonpoint source management program. This program works with federal, state and local governments, universities, private groups, and individual landowners to implement watershed projects that employ nonpoint source control practices and often monitor water quality results. Local watershed projects have resulted in significant reductions of atrazine levels in targeted drinking water reservoirs, in certain cases bringing them into compliance with water quality standards.

Programs with dedicated funding sources have worked best. A tax on coal has funded reclamation of abandoned coal-mined lands nationwide. Twenty years of such reclamation in Missouri has reduced the number of stream miles impaired by abandoned coal mine drainage from about 100 to about eight miles. A state sales tax for soil erosion control started providing funds for watershed level soil erosion control programs in 1985. This program, coupled with federal soil conservation programs, is reducing soil erosion in Missouri, based on the findings of periodic USDA National Resource Inventories.

Total Maximum Daily Loads

If a water body is deemed impaired by a pollutant, and it is determined that sufficient controls are not currently in place to protect water quality, it is placed on Missouri's Section 303(d) List. At this point, the Department is required to propose some form of additional pollution control that will restore the water to full attainment of the impaired use. This usually takes the form of a Total Maximum Daily Load, or TMDL. A TMDL is a document that includes a calculation of the amount of a specific pollutant a water body can absorb and still meet water quality standards. It also includes a plan to implement that limit, broken down into allocations from specific sources. Since 1999, DNR and EPA have established and implemented over 100 TMDLs. The current list of waters required to have TMDLs written, with the scheduled year of completion, can be found in Table 17 in Appendix 2.

COSTS AND BENEFITS

The economic costs of wastewater treatment and nonpoint source management are extremely diffuse and difficult to calculate. The total operating costs of municipal, private, and industrial treatment plants are not readily available. Likewise, it is difficult to estimate total expenditures on nonpoint source management. The amounts that the State of Missouri spends on various aspects of water pollution control and prevention, however, may give some indication of the relative investments required.

The Missouri Department of Natural Resources annually spends about \$6.4 million on monitoring and analysis of ambient water and related media. Approximately \$2.9 million is spent on permit issuance annually and about \$3.4 million on other facets of water pollution control and administrative support. Another significant expense is grants aimed at the improvement of water quality. The Section 319 grant program distributes about \$3.1 million annually and the Special Area Land Treatment (SALT) Program about \$5.4 million.

The economic benefits of improved water quality are even harder to quantify. Of all the money spent on water-based recreation and fishing in Missouri, it is nearly impossible to tell how much is dependent upon improved water quality. The same is true for the expense of drinking water treatment. But however great the economic benefits may be, the true benefits of clean water are high-quality recreation experiences, healthy and confident use of water resources and a robust aquatic biological community.

SIGNIFICANT THREATS TO WATER QUALITY

- Throughout the state, continuing suburban development impacts streams in several ways. Shortening and culverting of channels leads to the direct loss of streams and riparian areas. The increase in impervious surface area in the surrounding watershed leads to unnatural hydrograph patterns, with lower baseflow and higher stormflow. The altered channel and higher peak flows can increase erosion, while the runoff from the impervious surface carries increased levels of sediment and various chemicals from the urban environment. Elevated nutrient levels or bacterial contamination is also likely if individual or community domestic sewage systems are not well maintained.
- It is believed that channelization may have caused aquatic habitat degradation in roughly 32 percent of Missouri's streams, mainly in the northern and western plains and the southeastern lowlands. Large channelization projects affecting many miles of streams are no longer occurring, but many short projects still occur and continue to reduce the number of miles of natural stream channels statewide. Streams that were channelized many years ago still provide poor aquatic habitat, and these streams still contribute to flooding, high water velocities and streambank erosion as they try to recreate their natural sinuosity.
- Eutrophication of large, recreationally important reservoirs continues to be a concern. Heavy residential development around portions of these reservoirs can threaten water quality in many small coves and shoreline areas. The large size of these lakes and rugged local topography make centralized collection and treatment systems for wastewater difficult. Recent imposition of phosphorus limits on most wastewater discharges to Table Rock Lake has resulted in improved conditions in the James River arm of the lake.
- Mercury levels in fish in Missouri appear to be generally stable in recent years. As monitoring of mercury in fish in various waters of the state continues, new waters with elevated levels may be found, but those waters that have been monitored for long periods have not shown significant recent shifts in mercury levels. Re-evaluation of human health risk factors for mercury has led the Missouri Department of Health & Senior Services to issue an advisory regarding fish consumption among children 12 years of age and under, pregnant women and women who may become pregnant. These people are advised to limit consumption of all fish caught in Missouri to one meal per week, and consumption of bass over 12 inches in length to one meal per month. For other aspects of the advisory, please refer to www.dhss.mo.gov/fishadvisory/. Missouri is scheduled to complete a statewide TMDL for mercury in 2015. This comprehensive plan will address all waters considered impaired by mercury, currently and in the future. It will address a variety of sources of mercury within Missouri, while acknowledging that a significant portion of the mercury deposited in the state comes from external sources.

- Abandoned lead-zinc mines and their tailings continue to impact waters decades after mining has ceased. Missouri's Superfund Program is addressing some of these concerns. But long-term impacts are expected to remain. Although new mineral extraction operations would be managed under state permits, areas of the state that are very sensitive to disruption are being investigated for mining potential.
- Additional groundwater protection measures are needed. Missouri now has in place programs that register and inspect underground storage tanks and oversee the cleanup of leaking underground tank sites, programs for wellhead protection, sealing of abandoned wells and closing of hazardous waste sites. A complete groundwater protection program would also include a groundwater monitoring network and educational programs for those involved in the application of farm chemicals, transporters of hazardous materials and the general public.
- There are currently 427 Class I concentrated animal feeding operations (CAFOs) located in Missouri. These are operations containing at least 1,000 beef cattle, 2,500 large swine, or 100,000 broiler chickens. These facilities generate large amounts of animal manure and have the potential to cause serious water pollution problems. Commercial application of manure, often on fields at a great distance from its source, is also a growing trend within large-scale agriculture. The department is also concerned by cumulative impacts of numerous small animal production facilities. However, it is no longer issuing Letters of Approval for smaller facilities, meaning that they will be largely unregulated.
- Fish and invertebrates data indicate that many communities throughout the state are suffering from degraded quality of aquatic habitat. Physical alterations of the channel, alterations in stream flow patterns, degraded conditions in the riparian zone, and upland land use changes are all believed to be significant contributors to this problem.

SURFACE WATER SUMMARY

Table 1. Beneficial Use Support Status Of Missouri Classified Waters.*

STATUS		STREAM MILES	%	LAKE ACRES	%
Assessed	Full Support of Uses	11,191.0	50.1	260,804	88.8
	Non-Support	2,047.6	9.2	21,021	7.2
Unassessed	Non-Support Not Suspected	725.5	8.7	9,564	3.3
	Non-Support Suspected	8,406.2	32.1	2,307	0.8

Numbers in Table 1 updated August 15, 2008.

Full Support of Uses: Water quality meets the needs of all uses that Missouri recognizes for a particular water body, such as protection of fish and other aquatic life (the water quality does not interfere with the ability of aquatic life to live, feed and reproduce), livestock and wildlife watering (the water will not cause disease or injury to livestock and wildlife using the water for drinking), drinking water supply (the water meets all state and federal standards as a drinking water supply source water), swimming (the water will not cause disease or injury to swimmers or others participating in water-based recreation who may accidentally swallow small amounts of water), irrigation (the water will not cause disease or injury to crops), industrial water supply (the water will not cause excessive problems with corrosivity or mineral deposits in industrial piping and boilers), fish consumption (fish are safe to eat) and boating and canoeing.

Non-Support: Water quality is seriously affected to the point that at least one recognized use of the water body has been lost. These impairments are documented by data that meets the requirements of Missouri's 303(d) Listing Methodology.

Non-Support Not Suspected: There is inadequate information to make a water quality assessment of these waters, and the department knows of no data or information that would indicate a possible impairment.

Non-Support Suspected: These are waters for which some data or observations exist indicating that one or more designated uses may not be supported, but the data are not of sufficient quantity or quality to officially rate the water as impaired. The bulk of these waters are streams in the plains areas of the state, where nearly all streams have been affected or modified by agriculture.

* There are 22,370.3 miles of classified streams (permanently flowing streams or streams which maintain permanent pools during dry weather) and approximately 30,000 miles of unclassified streams (streams which are without water during dry weather). There are 293,696 surface acres of classified lakes. The number of surface acres of small unclassified lakes has not been estimated.

Table 2. Individual Use Support Summary For Classified Waters.

BENEFICIAL USE	SIZE ASSESSED	FULL SUPPORT	NON-SUPPORT	NOT ASSESSED	USE NOT APPLICABLE
STREAMS (MILES) (PERCENTAGE)					
AQUATIC LIFE	14,144.2 (63.2%)	13,096.0 (58.5%)	1,048.2 (4.7%)	8,226.1 (36.5%)	0 (0.0%)
FISH CONSUMPTION	1,240.4 (5.5%)	670.7 (3.0%)	569.7 (2.5%)	21,129.9 (94.5%)	0 (0.0%)
SWIMMING	5,778.0 (25.8%)	5,271.4 (23.6%)	506.6 (2.3%)	15,695.6 (70.2%)	896.7 (4.0%)
DRINKING WATER	2,808.7 (12.6%)	2,763.7 (12.4%)	45.0 (0.2%)	427.5 (1.9%)	19,134.1 (85.5%)
LAKES (ACRES) (PERCENTAGE)					
AQUATIC LIFE	292,134 (99.4%)	291,251 (99.2%)	883 (0.3%)	1546 (0.5%)	0 (0.0%)
FISH CONSUMPTION	240,343 (81.8%)	220,243 (75.0%)	20,100 (6.8%)	53,367 (18.2%)	0 (0.0%)
SWIMMING	260,637 (88.7%)	260,637 (88.7%)	0 (0.0%)	33,073 (11.3%)	0 (0.0%)
DRINKING WATER	100,262 (34.1%)	100,224 (34.1%)	38 (0.01%)	0 (0.0%)	193,434 (65.9%)

Table 3. Major Water Pollution Sources In Missouri Classified Waters.
(Stream Miles or Lake Acres Impaired)

Source	Stream Miles Impaired	Percent of Total Miles	Lake Acres Impaired	Percent of Total Acres
Unknown	993.6	4%	--	--
Atmospheric Deposition	494.8	2%	21,750	6%

Mining	346.0	2%	--	--
Tailings	310.4	1%	--	--
Other Mining Activities	35.6	*	--	--
Agriculture	308.5	1%	38	*
Crop Production	45.0	*	38	*
Hydromodification	137.6	1%	865	*
Channelization	71.6	*		
Flow Regulation/Modific.	7.0	*	--	--
Upstream Impoundment	29.2	--	865	*
Urban Runoff and Construction	91.6	*	--	--
Municipal and other Domestic Point Sources	70.2	*	--	--
Dam Failure	20.8	*	--	--
Natural Sources	19.0	*	--	--
Industrial Point Sources	16.2	*	--	--
Land Disposal	8.5	*	--	--
Recreational Activities	7.0	*	--	--

* Less than 1 percent

Table 4. Major Contaminants In Missouri Classified Waters.

Contaminant	Stream Miles Impaired	Percent of Total Miles	Lake Acres Impaired	Percent of Total Acres
Organic Enrichment /Low D.O.	698.5	2%	865	*
Bacteria	531.1	1%	--	--
Metals	273.0	*	21,750	7%
Mercury	--	--	21,750	7%
Lead	156.1	*	--	--
Cadmium	58.3	*	--	--
Zinc	54.2	*	--	--
Nickel	4.4	*	--	--
Unknown	161.3	1%	--	--
Sediment	73.9	*	--	--
Habitat Alterations	71.6	*	--	--
Chloride	47.9	*	--	--
Pesticides	45.0	*	38	*
Cyanide	34.0	*	--	--
Thermal Modification	22.8	*	--	--
Turbidity	19.3	*	--	--
pH	15.2	*	--	--
Flow Alterations	7.2	*	--	--

Sulfate	3.5	*	--	--
Ammonia	2.6	*	--	--
Color	1.4	*	--	--
Chlorine	0.4	*	--	--

* Less than 1 percent

Note: Many stream miles in Missouri are affected by more than one pollution source or pollutant; therefore, total miles/acres in Tables 3 and 4 can exceed miles/acres in Table 1 and 2.

CHAPTER 2. MISSOURI AND ITS WATER RESOURCES

Missouri has an area of more than 69,000 square miles and a population of 5.6 million people. About half of the population is concentrated along the border areas on opposite sides of the state in the Kansas City and St. Louis metropolitan areas. Population as well as industrial and commercial activity in major urban areas has remained relatively stable for the past few decades. Patterns of rural land use have changed greatly in some areas, particularly residential development around the larger cities, recreational development adjoining Lake Taneycomo and the eastern ends of Lake of the Ozarks and Table Rock Lake and the increasing development of large concentrated animal feeding operations in north-central and southwestern Missouri.

Missouri has an extensive stream network that includes more than 22,000 miles of classified streams and more than 293,000 surface acres in its 456 classified lakes. Three distinct regions exist within the state's boundaries and the particular geology and land use of each affect water quality. These areas are a prairie region, which is rolling land predominantly used for row crops and pasture; the Ozarks, a hilly area that is mostly pasture and forest; and the Bootheel, a flat alluvial plain adjoining the Mississippi River in southeast Missouri, which is used mainly for row crop production.

Water Quality Standards

Missouri's Water Quality Standards (10 CSR 20-7.031) provide the names and locations of all classified streams and lakes. This state regulation defines more than 3,600 individual stream and river segments and 456 lakes, lists which beneficial uses are assigned to each of these waters, and defines the level of water quality necessary to meet each of these uses. This is done by setting specific levels of naturally occurring or anthropogenic chemicals, known as numeric criteria, which are not to be exceeded in the water. The department is currently in the process of revising its water quality standards to include numeric criteria for nutrients (total nitrogen, total phosphorus) in lakes. The department is also working to develop criteria for nutrients in streams.

The remaining waters of the state, such as those in the headwater areas that do not have permanently flowing or standing water, and a number of small lakes, are not listed in the Missouri Water Quality Standards and do not have beneficial uses assigned to them. These unclassified waters (as well as the classified waters) are protected by the general criteria in the Water Quality Standards. The general criteria say that these waters must be free from conditions harmful to livestock or aquatic life, as well as aesthetic problems such as demolition debris, trash, tires, odor, discoloration, or the presence of objectionable floating or deposited material.

Table 5. Missouri's Water Resources.

Missouri Population (2000 census)	5,595,211
Surface Area (square miles)	69,704
Number of Four-Digit HUCs*	12
Number of Eight-Digit HUCs*	66
Number of Twelve-Digit HUCs*	1,965**
Classified Stream Miles	22,370.3
Unclassified Stream Miles	82,126
Number of Classified Lakes	456
Total Classified Lake Surface Area (acres)	293,696
Freshwater Wetlands Area (acres)	113,012***

*HUC (Hydrological Unit of Classification): A hierarchical system of watershed delineation, developed by USGS.

The system describes scales ranging from major continental basins (two digits) to small local drainages (14 digits).

** The NRCS is now working on the 11th version of the 12-digit HUC delineation for the United States. This version is not yet completed and the final number of 12-digit HUCs could be slightly different.

*** From the Land Cover project of the Missouri Resources Assessment Partnership.

CHAPTER 3. SURFACE WATER ASSESSMENT

DESCRIPTION OF MISSOURI'S CURRENT WATER QUALITY MONITORING PROGRAM

Purpose

The major purposes of the water quality monitoring program are (1) to characterize background or reference water quality conditions; (2) to better understand daily, flow event and seasonal water quality variations and their underlying processes; (3) to characterize aquatic biological communities and habitats and to distinguish between the impacts of water chemistry and habitat quality; (4) to assess time trends in water quality; (5) to characterize local and regional impacts of point and nonpoint source discharges on water quality; (6) to check for compliance with water quality standards or wastewater permit limits; (7) to aid in developing TMDLs to prescribe acceptable limits of pollutants to be discharged; and (8) to support development of strategies to return impaired waters to compliance with water quality standards. All of these objectives are statewide in scope.

Coordination with Other Monitoring Efforts in Missouri

The department cooperates with other agencies in performing special water quality studies. In 1998, a multi-agency task force including the Missouri Department of Natural Resources, Missouri Department of Conservation (MDC), U.S. Environmental Protection Agency (USEPA), the U.S. Geological Survey (USGS), U.S. Forest Service (USFS), U.S. Department of Agriculture, Natural Resources Conservation Service (USDA NRCS), and University of Missouri convened to develop an outline of a statewide aquatic resources monitoring plan, define partnership roles in this monitoring plan and discuss the kind of research needed to further this new monitoring effort. The first major product of this work group was an agreement to initiate a cooperative statewide aquatic invertebrate and fish monitoring program by MDC and the Department of Natural Resources. In 2000, the Missouri Resource Assessment Monitoring (RAM) Program was created. The RAM Program is a biological monitoring program that monitors fish and invertebrate communities in wadeable streams throughout the state. It is designed to sample the entire state every five to six years. MDC has taken the lead, sampling more than 100 sites each year in various Ecological Drainage Units. Since it began, more than 700 fish samples and 400 invertebrate samples have been taken.

To maximize efficiency, the department routinely coordinates its monitoring activities to avoid overlap with other agencies and provide and receive interagency input on monitoring study design. Data from other sources is used for meeting the same objectives as department sponsored monitoring. The agencies most often involved are USGS, USEPA, MDC, the U.S. Army Corps of Engineers (COE), the USDA Agricultural Research Service (ARS) and the Missouri Department of Health & Senior Services (MDHSS). However, the department also tracks the monitoring efforts of the National Park Service (NPS), USFS, several of the state's larger cities, the states of Arkansas, Kansas, Iowa, and Illinois, and graduate level research conducted at universities within Missouri. The department also uses monitoring data acquired by wastewater dischargers as a condition of discharge permits issued by the department. The department began using data collected by volunteers that have passed Quality Assurance and Quality Control (QA/QC) tests in 1995.

Networks and Programs

1. Fixed Station Network

- A. Objective: To better characterize background or reference water quality conditions, to better understand daily, flow event and seasonal water quality variations and their underlying processes, to assess time trends and to check for compliance with water quality standards.
- B. Design Methodology: Sites are chosen based on one of the following criteria:
 - site is believed to have water quality representative of many neighboring streams of similar size due to similarity in watershed geology, hydrology and land use, and the absence of any impact from a local point or discrete nonpoint water pollution source.

- site is downstream of a significant point source or localized nonpoint source area.

C. Number of Sites, Sampling Methods, Sampling Frequency, Parameters:

- USGS/DNR cooperative network: 59 sites statewide, horizontally and vertically integrated grab samples six to 12 times per year, analyzed for nutrients, temperature, pH, dissolved oxygen, percent saturation, specific conductance, flow, *E. coli*, fecal streptococci, and fecal coliform; trace metals, major ions and suspended solids two to 12 times annually at all sites; pesticides six times annually at four sites.
- DNR chemical monitoring of more than 90 sites two to four times per year for nutrients, major ions, flow, temperature, pH, dissolved oxygen and specific conductance.
- DNR raw water sampling of public drinking water reservoirs: grab samples at nine sites four times per year for 10 common agricultural herbicides.
- UMC/DNR lake monitoring network: about 100 lakes monitored spring through fall for nutrients, chlorophyll, turbidity and suspended solids.
- DNR routine monitoring of finished public drinking water supplies for bacteria and trace contaminants.
- Routine bacterial monitoring of swimming beaches at Missouri state parks during the recreational season by the department's Division of State Parks.
- Routine monitoring of sediment on 10 to 15 discretionary sites annually. All sites are monitored for several heavy metals and organic contaminants. A pore water sample is analyzed for ammonia and a Microtox toxicity test or similar toxicity screening test on the pore water or whole sediment sample is performed.

2. Intensive Surveys

A. Objective: To characterize the water quality impacts from a specific pollutant source area.

B. Design Methodology: Determination of contaminants of concern based on previous water quality studies, effluent sampling and/or NPDES permit applications, use of multiple sampling stations downstream and upstream (if appropriate). If contaminants of concern have significant seasonal or daily variation, season of the year and time of day variation must be accounted for in sampling design. These studies would also require multiple samples per site over a relatively short time frame (e.g., 6 to 8 visits over a 2 to 3 day period or 10 to 15 visits over a 2 to 3 year period).

C. Number of Sites, Sampling Methods, Sampling Frequency, Parameters: The Missouri Department of Natural Resources conducts or contracts for 10 to 15 special studies annually. Each study has multiple sampling sites. Number of sites, sampling frequency and parameters vary greatly depending on the study.

3. Toxics Monitoring Program

Monitoring of toxics is not a separable part of the monitoring program. The fixed station network and many of our intensive studies monitor for toxic chemicals. In addition, major municipal and industrial dischargers must monitor for toxicity in their effluents as a condition of their NPDES permits.

4. Biological Monitoring Program

The Missouri Department of Natural Resources has developed a monitoring program for aquatic invertebrates that is proving very useful for characterizing the health of aquatic biological communities in Missouri. Forty-five reference streams were identified across the state during the 1990s and were used to develop criteria describing reference communities of macroinvertebrates for different ecological regions. More than 50 stream sites are sampled annually, generally chosen to support the formation of the 303(d) list and the creation of TMDLs. Sampling results and data analysis are available from a central database. A long-term objective of the program is to establish a fixed statewide network of biological monitoring stations in order to monitor large-scale trends. Fish sampling must also be a part of an effective long-term biological monitoring program.

The department contracted with the U.S. Geological Survey in 2001 to conduct a study of aquatic invertebrate

communities on the Missouri River. The study, *Validation of Aquatic Macroinvertebrate Community Endpoints for Assessment of Biological Condition in the Lower Missouri River*, was published in 2005. The department sees this work as the first of several steps by which it will promote a better understanding of fish and invertebrate communities of large rivers, and ultimately the development of biological criteria for the Missouri and Mississippi rivers.

5. Fish Tissue

- A. Objective: Fish tissue monitoring can address two separate objectives. These are 1) the assessment of ecological health or the health of aquatic biota, and 2) the assessment of human health risk based on the level of contamination of fish fillets.
- B. Design Methodology. Sites were chosen based on one of the following criteria:
- site is believed to have water and sediment quality representative of many neighboring streams of similar size due to similarity in geology, hydrology and land use, and the absence of any known impact from a local point source or discrete nonpoint water pollution source.
 - site is downstream of a significant point source or localized nonpoint source area.
- C. Number of Sites, Sampling Methods, Sampling Frequency, Parameters:
The department and USEPA have a cooperative fish tissue monitoring program that collects whole fish composite samples at approximately 13 fixed sites once every two years. The preferred species for these sites are either carp or redbreasted sunfish. About 45 discretionary sites are also sampled annually for two fish fillet composite samples. The Missouri Department of Conservation is a partner in this portion of the program. One sample is of a top carnivore fish such as largemouth bass, smallmouth bass, walleye or sauger. The other sample is for a species of a lower trophic order such as catfish, carp or sucker.

In addition, MDC samples approximately 20 sites annually through its Fish Contaminant Monitoring Program, which began in 1984. . Sites are coordinated with the Department of Natural Resources and the Department of Health and Senior Services and a wide variety of species are sampled.

Both of these monitoring programs analyze for several chlorinated hydrocarbon insecticides, PCBs, lead, cadmium, mercury and fat content.

Laboratory Analytical Support

Laboratories Used:

- USGS/DNR Cooperative Fixed Station Network: USGS Lab, Denver, Colorado
- DNR Public Drinking Water Reservoir Network: Missouri Department of Natural Resources Environmental Lab
- Intensive Surveys: varies, many are done by Missouri Department of Natural Resources Environmental Lab
- Toxicity Testing of Effluents: many commercial labs
- Biological Criteria for Aquatic Invertebrates: Missouri Department of Natural Resources Environmental Lab and University of Missouri, Columbia
- Fish Tissue: USEPA Region VII Lab, Kansas City, Kansas and miscellaneous contract labs (Missouri Department of Conservation)
- NPDES self-monitoring: commercial labs
- DNR Public Drinking Water Monitoring: Missouri Department of Natural Resources and commercial labs

Quality Assurance/Quality Control Program (QA/QC)

Missouri and Region 7 EPA have completed a Total Quality Management Plan. All environmental data generated directly by the department or through contracts funded by the department or EPA will require a quality assurance project plan (QAPP) following EPA's Guidance for Quality Assurance Project Plans (QA/G-5).

Data Storage and Management

The department retrieves raw data from the USGS database, NWIS, and numerous state, federal and municipal sources. This data is imported into the Missouri state computer system for storage and statistical analysis. The department maintains a good deal of water quality data in a number of ACCESS databases. Data in these files comes from the department's own monitoring efforts and a wide array of other public and private sources.

Beginning in 1999, the department began linking many separate databases pertaining to water quality, other environmental data and information on regulated facilities via ACCESS software and importing this data into a GIS (ArcView) environment. The majority of the work has been completed, but new data that enters this process is received on a regular basis.

The Missouri Department of Natural Resources has developed a database that provides access to the raw data and analysis of all quantitative invertebrate sampling it has performed. This database is now available to the public on-line at www.dnr.mo.gov/env/esp/biologicalassessments.htm. Within the next year, the Missouri Department of Conservation plans to have on-line access to its RAM database, as well as its fisheries and aquatic habitat database that contains community-level data. These databases are updated on an ongoing basis.

Training and Support of Volunteer Monitoring

Two volunteer monitoring programs are now generating water quality data in Missouri. The first is the Lakes of Missouri Volunteer Program (LMVP), a cooperative program between the Department of Natural Resources, the University of Missouri and volunteers who monitor lakes throughout Missouri, including Lake Taneycomo, Table Rock Lake, and several lakes in the Kansas City and St. Louis areas. In 2007, approximately 130 volunteers monitored 112 sites on 52 lakes, an increase from the 100 sites on 41 lakes monitored by volunteers in 2005. Data from this program is used by the university as part of a long-term study on the limnology of Midwestern reservoirs.

The second program involves volunteers who monitor water quality of streams throughout Missouri. The Volunteer Water Quality Monitoring Program is a cooperative project of the Department of Natural Resources, the Department of Conservation, and the Conservation Federation of Missouri and is a subset of the Missouri Stream Team Program. In the last 15 years, 1993 to 2008, 6,275 citizens have attended the 398 water quality monitoring workshops held by program staff across the state of Missouri. This has resulted in submission of more than 15,000 separate data sheets at 2,371 Missouri stream sites. The volunteer hours spent in this endeavor total more than 224,324 hours, worth an approximate \$4,210,561 of added value to the state.

In Fiscal Year 2008, 331 new Stream Teams formed, and the total number of Stream Teams reached 3,439. That year, 395 citizen volunteers attended the introductory level workshop. After the introductory class, many proceeded on to at least one more class of higher level training. 153 volunteers participated in Level 1 workshops, 50 in Level 2 workshops, one in a Level 3 audit, and five in Cooperative Stream Investigation (CSI) audits. Each level of training is a prerequisite for the next higher level, as is appropriate data submission. Levels 2, 3, 4 and CSI represent increasingly higher quality assurance and quality control stringency. Data submitted by volunteers of Level 2 or above may be used by the department to establish baselines of water quality for particular streams, or to point out potential problems that are in need of further investigation. Twelve volunteers have received Cooperative Site Investigation training as of September 2008. During Fiscal Year 2007, volunteers submitted 344 sets of macroinvertebrate data and 872 set of water quality data from 290 different stream sites. Wastewater and drinking water operators have also started attending in order to receive operator certification credits. To date, 95 operators have attended Stream Team training.

Data Interpretation and Communication

Missouri now uses an ACCESS database for tracking and reporting water body use attainment information. An EPA contractor, RTI, completed geo-referencing of Missouri's classified waters in 1998. The stream and lake network of the state, water quality standards information, the locations of permitted wastewater discharges and other potential pollutant sources and information describing them can now all be viewed within a GIS (ArcView) environment. The department recently developed an Interactive Map View and Query tool for public use that displays a variety of geographic information, www.dnr.mo.gov/internetmapviewer/.

The department has a variety of water quality information available on its Web site (www.dnr.mo.gov). This information includes, or will include, TMDLs, the 305(b) Report and 303(d) List, a list of all classified waters of Missouri that includes monitoring and assessment information on each water, water quality information sheets for 303(d) candidate waters, and watershed information sheets from various watersheds around the state.

Sharing Data with the Public

Water quality data accessibility is easy. Contact the Water Protection Program for more information.

1. Requests for very general information on water quality may be made by calling 1-800-361-4827. They may be filled by the 305(b) Report, pamphlets or fact sheets. Much of this information, plus information on Missouri's 303(d) List and completed Total Maximum Daily Load (TMDL) studies, is also available on the Internet at:

<http://www.dnr.mo.gov/env/wpp/wp-index.html>

2. Some requests may be for information on a specific water body or for more detailed information on a specific topic that might include summaries of major studies or available data. These requests are usually filled by the Missouri Watershed Information Sheets, documents that describe Missouri's watersheds and provide information on land use, hydrogeology, stream flow and water quality issues and concerns in each.
3. More specific requests may require published reports or water quality data files. If the report or data was generated by the department, it can be sent to the requestor through electronic mail or regular mail (a hard copy for small reports and data files, or floppy or compact disks for larger data files). Alternatively, the requestor may visit the department office at 1101 Riverside Dr. in Jefferson City and view the files directly. If the report or data file did not originate with the department, the request is sent to the organization that published the report or data.

Requests for more specific water quality information, or requests to view water quality data files, should be sent to:

Missouri Department of Natural Resources
Water Protection Program
ATTN: John Ford
P.O. Box 176
Jefferson City, MO 65102-0176
Phone: (573) 751-7024 Fax: (573) 522-9920
Email: john.ford@dnr.mo.gov

Monitoring Program Evaluation

The water quality monitoring program within the department has traditionally focused on the chemical characterization of water quality in both those streams that are free of, and subject to, point source wastewater discharges. While the monitoring has been able to keep pace with our more critical point source assessment needs and has done a good job of characterizing regional water quality unimpaired by point source discharges, the size and scope of the department's monitoring has fallen far short of the state's information needs. The advent of large concentrated animal feeding operations (CAFOs) in Missouri, concern over eutrophication of our large recreational lakes and continuing urban sprawl, among other problems, have produced questions our present monitoring program is incapable of answering.

A water quality monitoring strategy for Missouri was completed in 2005 and was updated in 2007. This proposal provides an overview of the current monitoring program and identifies additional needs. Among the major monitoring needs identified by this strategy are biological monitoring for great rivers, large rivers, and large reservoirs, chemical and biological monitoring for wetlands, and increased surveys of unclassified streams.

ASSESSMENT METHODOLOGY

This section describes the procedures used by the Missouri Department of Natural Resources to rate the quality of Missouri's waters.

Water quality is judged by its conformance with Missouri's Water Quality Standards. These standards were first implemented for all Missouri streams and a few large lakes in 1970 and are revised at least once every three years. These standards now list more than 22,000 miles of classified streams, 457 classified (significant, mostly public) lakes representing 293,759 surface acres of water, and the uses for which these waters are protected. These standards also list the maximum allowable concentrations of chemicals and bacteria in these waters.

The table below lists the various uses of Missouri's waters and the portions of state waters that are protected for each use.

Table 6. Missouri Waters Protected For Various Uses.

<u>Designated Use</u>	<u>Stream Miles</u>	<u>% of Total</u>	<u>Lake Acres</u>	<u>% of Total</u>
Protection of Aquatic Life and Fish Consumption	22,370.3	100	293,696	100
Subset: Warm-Water Fishery	19,107.2	85	282,826	96
Cool-Water Fishery*	2,999.5	13	0	0
Cold-Water Fishery**	263.6	1	10,870	4
Livestock and Wildlife Watering	22,370.3	100	293,696	100
Whole-Body-Contact Recreation	21,473.6	96	293,696	100
Secondary Contact Recreation	7,085.3	32	235,143	80
Drinking Water Supply	3,236.2	14	100,262	34
Industrial	1,252.0	6	7,003	2
Irrigation	3,953.3	18	0	0
Anti-degradation:				
Outstanding National Resource Waters	171.2			
Outstanding State Resource Waters	200.5***			
Total Classified Waters in Missouri	22,370.3		293,696	

* Smallmouth Bass, Rock Bass

** Trout

*** Outstanding State Resource Waters also include 270 acres of marsh wetlands in three locations.

Classified streams of Missouri are all permanently flowing streams or streams with permanent pools. All classified waters of the state, including significant public lakes, are classified for protection of aquatic life, livestock and wildlife watering, and fish consumption by humans. The Water Quality Standards for these uses set the maximum allowable concentrations for 110 chemicals in these waters. A subset of these waters classified for drinking water supply has maximum allowable concentrations for an additional 20 chemicals in the standards. Waters protected for whole body contact recreation such as swimming or water skiing also have a maximum allowable bacteria standard.

Missouri's Water Quality Standards also contain narrative criteria. These standards are not numbers but general statements about the expectations for waters of the state. These standards require waters to be free of objectionable odors, color, turbidity, trash, floating materials or bottom deposits, and of conditions harmful to aquatic life such as high water temperature, low dissolved oxygen or chemical toxicity. Importantly, these standards apply not just to the classified waters, but to all waters of the state including the small intermittent streams that only carry water during and shortly after rainfall or snow melt.

The Methodology for the Development of the 2008 Section 303(d) List in Missouri, commonly referred to as

Missouri's 2008 Listing Methodology Document, or LMD, describes in detail both what data may be used for assessment and what assessment methods are to be used in interpreting Missouri's Water Quality Standards to arrive at both the 2008 303(d) list and this 2008 305(b) report. This document goes through a process of stakeholder input and review and is revised during every biennial listing cycle. Missouri's proposed 2008 303(d) list is presented as Table 14 in Appendix 1 of this report. Table 15 contains those waters which were also found to be impaired, but which already have measures in place to correct the impairment, such as a Total Maximum Daily Load (TMDL), or otherwise do not qualify for the 303(d) list. Table 16 lists those waters for which an impairment is suspected, but sufficient data does not currently exist to make an official assessment.

Table 7. Summary of Monitored and Evaluated Waters.

Degree of Use Support	Evaluated Stream Miles	Monitored Stream Miles	Total Stream Miles Assessed	Evaluated Lake Acres	Monitored Lake Acres	Total Lake Acres Assessed
Fully Supporting All Assessed Uses	6,722.9	4,476.9	11,199.8	25,435	235,369	260,804
Impaired For One or More Uses	0.0	2,047.6	2,047.6	0	21,021	21,021
TOTAL ASSESSED	6,722.9	6,524.5	13,247.4	25,435	256,390	281,825
TOTAL UNASSESSED			9,122.9			11,871

Monitored waters are those waters where water quality data has been collected recently enough to be considered representative of present conditions. Approximately 31 percent of all classified stream miles and 91 percent of all classified lake acres are considered to be monitored. The department only considers monitored waters in the development of the state's Section 303(d) List.

Evaluated waters are those waters which have not been monitored in recent years but have geology and land use similar to nearby monitored waters and whose water quality assessment is assumed to be the same as those nearby monitored waters. Thirty-four percent of all classified stream miles and eight percent of all classified lake acres are considered to be evaluated.

Unassessed waters are those waters that are not monitored directly nor do they have nearby monitored waters with similar geology and land use. Thus, these represent the classified waters in the state for which we are unable to make an accurate assessment of their compliance with water quality standards and Clean Water Act goals. Three percent of classified stream miles fall into this category. Less than one percent of classified lake acres are considered to be unassessed.

ADDITIONAL INFORMATION ON MISSOURI LAKES

Summary Statistics

Information on beneficial use attainment in classified lakes is given in Tables 1 and 2. The acreage of classified lakes not fully supporting beneficial uses by major source category are as follows:

Point Sources	0 acres
Nonpoint Sources	21,788 acres
Hydromodification	865 acres

Background

Missouri's definition of significant lakes corresponds to the Department of Natural Resources list of classified lakes and includes lakes that falls into one of the following three categories: (1) small public drinking water reservoirs; (2) large multi-purpose reservoirs; and (3) reservoirs or lakes with important recreational values.

It should be noted that Missouri has only a few naturally occurring lakes, these being primarily depressions or old oxbows on the Missouri or Mississippi River floodplain. Most classified lakes in the state are man-made reservoirs. In addition, high acidity is not a problem in Missouri lakes due to the high amounts of calcium carbonate found in the geology.

Trophic Status

Eutrophication is a natural process that occurs in lakes involving the gradual filling of the lake over time accompanied by increasing aquatic plant growth. This concept also encompasses the enrichment of lakes and reservoirs by addition of nitrogen and phosphorus from human activity. This additional nutrient load causes increased aquatic plant growth, predominantly of phytoplankton, which causes lake water to become greener and more turbid.

The trophic state of lakes typically refers to the amount of nitrogen and phosphorus entering the lake or the amount of algae or other aquatic plants present in the lake. Oligotrophic lakes are clear with few nutrients and very little aquatic plant growth. Mesotrophic, eutrophic and hypereutrophic are terms referring respectively to lakes with increasing levels of nutrients and aquatic plant growth. Trophic state is an important way to characterize lakes because it relates directly to such factors as lake clarity, which is greater in oligotrophic and mesotrophic lakes, and fish production, which tends to be greater in eutrophic lakes.

Summary results of studies conducted by the University of Missouri between 1989 and 2007 on trophic status of Missouri lakes follow.

Table 8. Trophic Status Of Selected Missouri Lakes And Reservoirs.

<u>LAKE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>YEARS OF RECORD</u>	<u>SECCHI</u> ¹	<u>TP</u> ²	<u>TN</u> ³	<u>CHL-A</u> ⁴	<u>TROPHIC STATE</u> ⁵
<u>GLACIAL PLAINS</u>								
*Allaman Lake	Clinton	24, 56N, 30W	6	1.2	42	682	16	E
Baring C. Club Lake	Knox	26, 63N, 12W	9	1.3	28	938	20	E
Bean Lake	Platte	12/14, 54N, 37W	1	0.1	264	1,658	144	HE
Belcher Branch Lake	Buchanan	8/17, 55N, 34W	4	1.1	35	531	13	E
Bethany Lake #2	Harrison	27, 64N, 28W	11	1.3	33	713	11	E

<u>LAKE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>YEARS OF RECORD</u>	<u>SECCHI¹</u>	<u>TP²</u>	<u>TN³</u>	<u>CHL-A⁴</u>	<u>TROPHIC STATE⁵</u>
Big Lake	Holt	18/19, 61N, 39W	1	0.2	328	2,508	166	HE
Bilby Ranch Lake	Nodaway	13/24, 64N, 38W	8	1.0	54	1,024	40	E
Blind Pony Lake	Saline	SE18, 49N, 22W	12	0.7	85	1,252	46	E
Bowling Green Lake	Pike	29, 53N, 2W	18	1.9	25	534	9	M
Brookfield Lake	Linn	33, 58N, 19W	16	1.2	23	616	8	M
*Busch W.A. #37	St. Charles	27, 46N, 2E	3	1.2	28	485	7	M
Cameron Lake #3	Dekalb	9, 57N, 30W	1	0.5	86	1,125	21	E
Cameron Lake #4 (Grindstone)	Dekalb	5, 57N, 30W	1	0.4	196	1,753	22	HE
Charity Lake	Atchison	32, 66N, 41W	3	1.5	39	615	17	E
Lake Contrary	Buchanan	26, 57N, 36W	6	0.3	365	3,060	194	HE
Crystal Lake	Ray	32, 53N, 29W	2	0.6	82	918	34	E
*Daniel Boone Lake	Shelby	31/32, 58N, 12W	2	0.2	187	1,424	38	HE
*Dean Lake	Chariton	3, 54N, 21W	1	0.1	382	2,110	5	HE
Deer Ridge Lake	Lewis	18, 62N, 8W	18	1.1	43	770	15	E
Edina Reservoir	Knox	12, 62N, 12W	10	0.7	70	1,258	24	E
Ella Ewing Lake	Lewis	21, 64N, 10W	8	0.6	87	1,371	33	E
Forest Lake	Adair	14, 62N, 16W	18	1.4	23	410	5	M
Fox Valley Lake	Clark	27, 66N, 8W	7	2.3	19	611	8	M
Green City Lake	Sullivan	NE16, 63N, 18W	7	0.6	78	1,052	29	E
Hamilton Lake	Caldwell	15, 57N, 28W	11	0.8	61	968	14	E
Harrison County Lake	Harrison	17/30, 65N, 28W	8	0.8	59	1,098	43	E
Hazel Creek Lake	Adair	31, 64N, 15W	13	1.3	28	603	8	M
Henry Sever Lake	Knox	14, 60N, 10W	18	0.9	54	1,058	19	E
Higginsville Lake	Lafayette	9, 49N, 25W	18	0.7	99	1,224	25	E
Hunnewell Lake	Shelby	25, 57N, 9W	18	1.0	46	804	21	E
Indian Creek Lake	Livingston	15/27, 59N, 25W	5	1.7	23	630	12	M
Jamesport Comm. Lake	Daviess	20, 60N, 26W	1	0.3	139	2,120	141	HE
*Jo Shelby Lake	Linn	36, 57N, 22W	2	0.9	70	546	37	E
King Lake	Dekalb	SW34, 61N, 32W	6	0.2	202	1,756	24	HE
Kraut Run Lake (Busch WA #33)	St. Charles	23, 46N, 2E	18	0.5	100	1,122	61	HE
La Belle #2 Lake	Lewis	NE16, 61N, 9W	5	0.8	66	1,430	51	E
Lancaster New Lake	Schuyler	23, 66N, 15W	4	0.7	74	966	36	E
La Plata New Lake	Macon	14, 60N, 14W	4	1.3	26	790	14	E
Lawson City Lake	Ray	31, 54N, 29W	3	0.8	36	958	29	E
Limpp Lake	Gentry	29, 61N, 32W	3	0.4	117	1,681	80	HE
Lincoln Lake	Lincoln	8, 49N, 1E	18	2.3	17	440	5	M
Little Dixie Lake	Callaway	26, 48N, 11W	19	0.7	67	783	22	E
Long Branch Lake	Macon	18, 57N, 14W	19	0.7	49	841	16	E
Macon Lake	Macon	17, 57N, 14W	12	0.8	53	899	29	E
Maple Leaf Lake	Lafayette	4, 48N, 26W	7	1.1	40	846	22	E
Marceline City Lake	Chariton	14, 56N, 19W	10	0.8	110	1,160	44	E
Marceline Res.	Linn	28, 57N, 18W	2	0.9	64	1,056	32	E
Lake Marie	Mercer	36, 66N, 24W	10	2.7	15	445	4	M
Mark Twain Res.	Ralls	26, 55N, 7W	18	1.1	66	1,293	17	E
Maysville Lake (NW)	Dekalb	33, 59N, 31W	11	0.6	194	1,331	47	HE

<u>LAKE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>YEARS OF RECORD</u>	<u>SECCHI</u> ¹	<u>TP</u> ²	<u>TN</u> ³	<u>CHL-A</u> ⁴	<u>TROPHIC STATE</u> ⁵
Maysville Lake (Redmond)	Dekalb	3, 58N, 31W	1	0.9	68	852	26	E
Memphis #1 Lake	Scotland	14, 65N, 12W	11	0.6	80	1,257	48	E
Milan Lake (Elmwood)	Sullivan	26, 63N, 20W	10	0.8	58	789	20	E
Milan Lake (New)	Sullivan	35, 63N, 20W	10	1.1	41	691	13	E
Monroe City Lake B	Monroe	30, 56N, 7W	11	0.5	86	1,143	35	E
Mozingo Lake	Nodaway	19, 65N, 34W	8	1.4	31	860	23	E
Nehai Tonkayea Lake	Chariton	11, 55N, 18W	10	1.8	18	418	3	M
Nodaway Lake	Nodaway	20, 65N, 35W	8	0.8	42	1,032	21	E
Old Kings Lake	Lincoln	25, 50N, 2E	1	0.3	278	1,573	80	HE
Lake Paho	Mercer	25, 65N, 25W	11	0.8	48	841	14	E
Pape Lake (Concordia)	Lafayette	20, 48N, 24W	11	0.6	82	1,085	28	E
Pony Express Lake	Dekalb	33, 58N, 31W	11	0.8	69	1,060	33	E
*Prairie Lake	St. Charles	39.708, -90.691	1	0.7	98	790	12	E
*Prairie Slough	Lincoln	2/12, 51N, 2E	1	0.2	231	2,495	72	HE
Ray Co. Lake	Ray	13, 52N, 28W	3	0.4	158	1,969	134	HE
Rocky Fork Lake	Boone	31, 50N, 12W	8	1.9	23	546	7	M
Rocky Hollow Lake (Williams)	Clay	33, 53N, 30W	9	1.4	55	784	21	E
*Rothwell Lake	Randolph	3, 53N, 14W	3	1.2	52	858	30	E
Lake St. Louis	St. Charles	SW26, 47N, 2E	9	0.5	86	1,171	29	E
Lake Ste. Louise	St. Charles	SW27, 47N, 2E	3	1.1	31	513	6	M
Savannah Lake	Andrew	7, 59N, 35W	3	1.2	41	880	19	E
Shelbina Lake	Shelby	20, 57N, 10W	11	0.6	97	1,054	37	E
Smithville Lake	Clay	13, 53N, 33W	19	1.0	33	812	17	E
Spring Lake	Adair	SW20, 61N, 16W	9	1.2	35	533	9	E
Sterling Price Lake	Chariton	17, 53N, 17W	8	0.6	104	1490	76	HE
Sugar Creek Lake	Randolph	16, 54N, 14W	10	0.8	55	757	26	E
Sugar Lake	Buchanan	27, 55N, 37W	6	0.2	333	2,524	173	HE
*Swan Pond	Lincoln	39.101, -90.728	1	0.3	345	1,658	126	HE
Thomas Hill Res.	Randolph	24, 55N, 16W	12	0.7	49	760	15	E
Thunderhead Lake	Putnam	15, 66N, 19W	12	0.8	50	971	17	E
Unionville New Lake (Mahoney)	Putnam	27, 66N, 19W	13	0.6	95	1,207	39	E
Vandalia Lake	Pike	12, 53N, 5W	12	1.0	74	994	38	E
Lake Viking	Daviess	9, 59N, 28W	18	1.4	27	520	9	M
Wakonda Lake	Lewis	NE13, 60N, 6W	6	0.8	95	1,186	51	E
Watkins Mill Lake	Clay	22, 53N, 30W	18	0.9	41	632	18	E
Waukomis Lake	Platte	17, 51N, 33W	10	1.7	25	592	14	E
Weatherby Lake	Platte	15, 51N, 34W	3	2	20	403	5	M
Whiteside Lake	Lincoln	39.174, -91.011	3	2.4	20	627	6	M
Willow Brook Lake	Dekalb	4, 58N, 31W	5	0.7	82	1,161	50	E
Worth Co. Lake	Worth	29/32, 65N, 32W	3	0.6	74	1,413	51	E
<u>OSAGE PLAINS</u>								
Amarugia Highlands Lake	Cass	10, 43N, 32W	8	1.0	53	682	12	E
Atkinson Lake	St. Clair	6, 37N, 28W	18	0.5	77	1,011	39	E
Blue Springs Lake	Jackson	3, 48N, 31W	6	1.0	36	557	18	E
Bushwhacker Lake	Vernon	27, 34N, 32W	4	1.6	28	623	14	M
Butler Lake	Bates	14, 40N, 32W	5	0.7	67	941	33	E

<u>LAKE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>YEARS OF RECORD</u>	<u>SECCHI</u> ¹	<u>TP</u> ²	<u>TN</u> ³	<u>CHL-A</u> ⁴	<u>TROPHIC STATE</u> ⁵
Catclaw Lake	Jackson	14, 47N, 31W	2	0.2	126	862	4	E
Coot Lake	Jackson	22, 47N, 31W	2	0.7	50	856	10	E
Cottontail Lake	Jackson	14, 47N, 31W	2	0.2	140	946	15	E
*Four Rivers CA Lake	Vernon	4, 37N, 31W	1	1.0	34	460	7	M
Gopher Lake	Jackson	23, 47N, 31W	2	0.4	94	776	17	E
Harmony Mission Lake	Bates	15, 38N, 32W	8	1.1	49	844	24	E
Lake Harrisonville	Cass	26, 46N, 31W	9	0.8	52	951	19	E
Hazel Hill Lake	Johnson	28, 47N, 26W	7	0.7	53	1,019	35	E
Holden City Lake	Johnson	7, 45N, 27W	6	0.8	48	990	16	E
Jackrabbit Lake	Jackson	15, 47N, 31W	2	0.2	168	783	14	HE
Lake Jacomo	Jackson	11, 48N, 31W	9	1.3	34	574	19	E
Lamar Lake	Barton	32, 32N, 30W	12	0.8	83	1,017	49	E
Lone Jack Lake	Jackson	14, 47N, 30W	3	1.7	28	646	17	E
Longview Lake	Jackson	20, 47N, 32W	9	0.8	36	746	12	E
Lotawana Lake	Jackson	29, 48N, 30W	9	1.4	33	680	19	E
Montrose Lake	Henry	33, 41N, 27W	10	0.3	190	1,257	63	HE
Nell Lake	Jackson	15, 47N, 31W	2	0.6	68	834	10	E
North Lake	Cass	28, 45N, 31W	18	0.7	101	1015	43	E
Odessa Lake	Lafayette	15, 48N, 28W	3	1.4	39	852	22	E
Prairie Lee Lake	Jackson	27, 48N, 31W	9	0.8	56	903	26	E
Raintree Lake	Cass	6, 46N, 31W	18	0.6	58	919	14	E
Spring Fork Lake	Pettis	21, 44N, 21W	12	0.6	159	1,141	48	HE
Lake Tapawingo	Jackson	34, 49N, 31W	8	1.3	34	842	32	E
*Tebo Lake	Pettis	12, 44N, 22W	6	2.8	18	609	4	M
(Westmoreland)								
Winnebago Lake	Cass	9, 46N, 31W	10	0.9	50	842	20	E
<u>OZARK BORDER</u>								
*Ashland Lake	Boone	19, 46N, 11W	1	0.6	119	1,684		HE
*Bella Vista Lake	Cape Girardeau	2/11, 32N, 13E	7	1.4	24	542	11	M
Binder Lake	Cole	36, 45N, 13W	18	1.0	56	782	26	E
*Boutin Lake	Cape Girardeau	15, 32N, 14E	7	1.7	22	558	8	M
Creve Couer Lake	St. Louis	20, 46N, 5E	8	0.3	152	1,064	58	HE
*Dairy Farm Lake #1	Boone	34, 49N, 14W	1	0.5	105	1,645	69	HE
*Dairy Farm Lake #3	Boone	35, 49N, 14W	1	0.3	526	2,289	134	HE
*D.C. Rogers Lake	Howard	3, 50N, 16W	11	1.2	32	540	8	M
Eureka Lake	St. Louis	NE31, 44N, 4E	1	0.8	48	830	14	E
Fayette Lake #2	Howard	4, 50N, 16W	8	0.9	52	853	23	E
Lake Forest (Lake Ann)	St. Genevieve	36, 38N, 7E	10	1.3	43	649	22	E
Lake Girardeau	Cape Girardeau	9, 30N, 11E	7	0.9	66	945	45	E
Glover Spring Lake	Callaway	13, 47N, 9W	7	1.2	67	863	22	E
Goose Creek Lake	St. Francois	26, 38N, 6E	11	2.3	14	388	4	M
*Jennings Lake	St. Louis	8, 46N, 7E	1	0.7	78	682	18	E
Manito Lake	Moniteau	8/9, 44N, 17W	7	0.7	94	998	18	E
Lake Northwoods	Gasconade	33, 43N, 5W	12	1.2	24	448	5	M
Perry Co. Lake	Perry	22, 35N, 10E	8	0.8	79	1,034	43	E
Pinewoods Lake	Carter	7,26N, 3E	5	1.4	36	765	20	E

<u>LAKE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>YEARS OF RECORD</u>	<u>SECCHI¹</u>	<u>TP²</u>	<u>TN³</u>	<u>CHL-A⁴</u>	<u>TROPHIC STATE⁵</u>
Pinnacle Lake	Montgomery	24, 47N, 5W	6	2.7	22	454	5	M
Simpson Park Lake	St. Louis	16, 44, 5E	1	0.7	111	987	32	HE
Timberline Lake	St. Francois	23, 38N, 4E	11	4.2	9	294	2	O
Lake Tishomingo	Jefferson	5, 41N, 4E	11	1.9	22	490	6	M
*Tri-City Comm. Lake	Boone	24, 51N, 12W	10	0.8	57	865	20	E
Tywappity Lake	Scott	8, 29N, 13E	6	0.9	50	1,005	36	E
Wanda Lee Lake	St. Genevieve	2, 37N, 7E	10	1.3	56	577	26	E
Lake Wappapello	Wayne	3, 26N, 3E	18	0.9	37	518	24	E
Lake Wauwanoka	Jefferson	1, 40N, 4E	11	3.1	13	581	6	M
<u>OZARK HIGHLANDS</u>								
Austin Lake	Texas	30, 29N, 11W	10	1.6	22	545	8	M
Ben Branch Lake	Osage	14-15, 44N, 8W	1	3.0	12	517	5	M
*Bismarck Lake	St. Francois	19, 35N, 4E	7	1.6	22	388	7	M
Bull Shoals Lake	Taney	21-23N, 15-20W	8	2.2	18	360	8	M
*Lake Capri	St. Francois	30, 37N, 4E	18	4.6	6	290	1	O
*Lake Carmel	St. Francois	18, 37N, 4E	12	2.8	10	311	3	O
Clearwater Lake	Reynolds	6, 28N, 3E	18	1.9	14	224	5	M
Council Bluff Lake	Iron	23, 35N, 1E	18	3.3	8	234	2	O
Crane Lake	Iron	33, 32N, 4E	8	1.3	14	248	4	M
Fellows Lake	Greene	22, 30N, 21W	18	2.7	13	356	5	M
Fourche Lake	Ripley	22, 23N, 1W	11	3.4	10	245	3	O
Fredericktown City Lake	Madison	6, 33N, 7E	9	0.7	66	764	33	E
H.S. Truman Lake	Benton	7, 40N, 23W	18	1.2	45	853	17	E
Indian Hills Lake	Crawford	23, 39N, 5W	12	1.0	36	640	18	E
Lake Killarney	Iron	1, 33N, 4E	8	0.8	62	613	28	E
*Lafitte Lake	St. Francois	28, 37N, 4E	1	4.4	6	320	2	O
*Little Prairie Lake	Phelps	21, 38N, 7W	18	1.1	29	482	8	M
Loggers Lake	Dent	10, 31N, 3W	7	3.2	10	228	3	M
Lower Taum Sauk	Reynolds	33, 33N, 2E	9	2.1	12	196	4	M
Mac's Lake (Ziske)	Dent	NE17, 34N, 5W	7	1.6	24	598	20	E
*Lake Marseilles	St. Francois	29, 37N, 4E	10	3.7	10	353	2	O
McCormick Lake	Oregon	8-9, 25N, 4W	1	3.2	5	75	1	O
McDaniel Lake	Greene	26, 30N, 22W	17	1.4	32	471	18	E
*Miller Lake	Carter	1, 27N, 1E	9	1.5	19	484	7	M
Monsanto Lake (St. Joe State Park)	St. Francois	20, 36N, 5E	10	2.2	10	378	2	O
Noblett Lake	Douglas	25, 26N, 11W	7	2.7	17	250	4	M
Norfork Lake	Ozark	21N, 12W	6	1.7	23	631	6	M
Lake of the Ozarks (Lower)	Miller	19, 40N, 15W	16	2.0	29	598	15	E
Peaceful Valley	Gasconade	25, 42N, 6W	11	1.4	37	850	30	E
Pomme de Terre Lake	Hickory	2, 36N, 22W	19	1.8	28	564	15	E
*Pomona Lake	Howell	26, 26N, 9W	1	--	50	605	10	E
Ripley Co. Lake	Ripley	10, 23N, 1E	7	1.6	30	759	24	E
Roby Lake	Texas	3, 32N, 11W	8	2.1	18	431	5	M
Shawnee Lake (Turner)	Dent	NW17, 34N, 5W	7	1.7	28	583	22	E
Lake Shayne	Washington	25, 37N, 3E	17	2.9	7	276	1	O

<u>LAKE</u>	<u>COUNTY</u>	<u>LOCATION</u>	<u>YEARS OF RECORD</u>	<u>SECCHI</u> ¹	<u>TP</u> ²	<u>TN</u> ³	<u>CHL-A</u> ⁴	<u>TROPHIC STATE</u> ⁵
Sims Valley Lake	Texas	17, 27N, 8W	9	1.1	26	498	13	M
Lake Springfield	Greene	20, 61N, 16W	8	0.9	59	1,005	20	E
Stockton Lake	Cedar	15, 34N, 26W	19	2.9	14	458	7	M
Sunnen Lake	Washington	4, 37N, 1E	13	2.7	13	282	4	M
Table Rock Lake	Stone	22, 22N, 22W	16	3.3	11	388	5	M
Lake Taneycomo	Taney	8, 23N, 20W	7	3.3	23	787	3	M

SOUTHEASTERN LOWLANDS

Big Oak Tree S.P. Lake	Mississippi	14, 23N, 16E	2	0.6	44	530	12	E
Upper Big Lake	Mississippi	25, 27N, 16E	2	0.3	338	2,050	181	HE

¹Secchi depth (m)

²Total Phosphorus (µg/L)

³Total Nitrogen (µg/L)

⁴Chlorophyll A (µg/L)

⁵Trophic State: O=Oligotrophic, M=Mesotrophic, E=Eutrophic, HE=Hypereutrophic

*Unclassified Lake

Trophic status correlates strongly with physiographic regions of the state. In agricultural northern and western Missouri, most lakes of known trophic state are eutrophic, while in the Ozarks and Ozark border regions, trophic states are more equally divided between eutrophic and either mesotrophic or oligotrophic lakes. Most known hypereutrophic lakes are in glaciated northern Missouri, while nearly all oligotrophic lakes are in unglaciated, highly weathered Ozark terrain.

The method presently used by the state to determine trophic status was derived from the work by Wetzel, R.G., 1975; "Limnology," Table 14-11; and from Vollenweider, R.A. and J.J. Kerekes, 1980. EPA440/5-81-010; "Restoration of Lakes and Inland Waters." The criteria are shown in the table below.

Table 9. Definition Of Trophic Classification.

Trophic Class	Chlorophyll-A (ug/l)	Total phosphorus (ug/l)
Oligotrophic	<3	<10
Mesotrophic	3-10	10-30
Eutrophic	11-56	31-100
Hypereutrophic	>56	>100

Controlling Pollution in Lakes

In Missouri, agriculture is considered the primary source of nonpoint source pollution, although urban areas represent a very significant source, as do abandoned mine lands. The department works to implement effective and appropriate Best Management Practices in the watersheds of impaired lakes and reservoirs.

In-lake management techniques that were previously funded under Section 314 can now be funded under Section 319 in the context of an appropriate Nonpoint Source (NPS) project. Several in-lake management techniques are eligible for Section 319 funding, including water level drawdown, shading and sediment covers, biological controls such as fish or insects, and planting or harvesting of aquatic plants.

In addition, the department conducts and helps fund monitoring on lakes throughout Missouri. This includes statewide lake assessments and volunteer lake monitoring that is now funded through Section 319. For example, the University of Missouri-Columbia's Statewide Lake Assessment Program evaluates approximately 100 lakes each year. The program began collecting annual samples in 1989, with some samples taken as far back as 1978.

The 319 Program supplies grants to improve lakes, such as projects that provide information and education. The department also works with several watershed groups on a regular basis. There are at least 76 watershed groups in Missouri. These groups work to educate and inform residents and landowners in their watershed about techniques they can use to minimize nonpoint source pollution.

The department's Soil and Water Conservation Program also helps Missouri's agricultural landowners conserve soil and water resources through several incentive programs, which are funded by a statewide sales tax. These programs include the Cost-Share Program, Loan Interest-Share Program and Agricultural Nonpoint Source Special Area Land Treatment Program (AgNPS SALT). Practices offered for cost-share reduce soil erosion by a variety of methods that may include increasing crop residue, improving vegetation, diversion or containment of water to facilitate slower release, protection of stream bank and forested areas from livestock, and reduction of wind erosion. Cost-share and other incentives are also available through the Natural Resources Conservation Service. AgNPS SALT projects focus on decreasing agricultural nonpoint source pollution and usually encompass watersheds averaging 50,000 acres in size. There are 70 active SALTS. Of the 18 that have been completed, five focused primarily on protecting lakes in the watershed. The Missouri Department of Conservation also has programs and information to help Missourians manage private lakes.

Total Maximum Daily Loads also help to reduce pollution in Missouri lakes and reservoirs. The program began in 1999 and as of August 15, 2008, 149 TMDL studies have been completed. Six of these were for lakes, and focused primarily on reducing nonpoint source pollution entering the lake. Appendix II shows the proposed schedule to complete needed TMDLs.

STATUS OF WETLANDS

Originally about 4.8 million acres (10.7 percent of the land surface of the state) in Missouri were wetlands. Today, it is estimated that only about 113,000 acres remain. Several state and federal agencies have recognized the need to preserve and enhance our remaining wetlands.

The department's Water Resources Center administers the State Wetlands Conservation Plan, which encourages the protection and restoration of wetlands, and provides technical assistance to other agencies involved in wetland issues. With the help of state and federal agencies, the department has completed several projects, including studies assessing urban wetlands, identifying types of wetlands through image analysis, determining the hydrology of Missouri riparian wetlands, and an assessment of specific wetland mitigation sites. Currently the department and its partners are working to locate small headwater wetlands in agricultural areas and establish a dollar value for wetlands under past, present and future conditions.

The Missouri Department of Conservation currently has 12 large intensively managed wetlands composed of approximately 26,000 acres. From 1998 to 2003, MDC purchased 23,186 acres of wetlands and restored an additional 32,662 acres.

In 1994, the U.S. Fish and Wildlife Service began the process of acquiring land from willing sellers in the Missouri River floodplain for a national wildlife refuge called Big Muddy. The project authorizes the purchase of up to 60,000 acres in 25 to 30 units between Kansas City and St. Louis. The refuge consists of 11,154 acres of land in eight units as of August 2008. Although access is limited at some units, all are publicly accessible. The refuge focuses on restoring several kinds of riverine and floodplain habitat, allowing lands to interact naturally with the river and act as seasonal wetlands.

The Natural Resources Conservation Service Wetlands Reserve Program, begun in 1992, purchases easements of wetlands and provides funds for restoration of those wetlands. There are presently 790 easements covering 116,839 acres in place in Missouri.

Together MDC, USFWS and NRCS have protected more than 140,000 acres through easements or purchases, restored more than 43,000 acres, and enhanced more than 41,000 acres of wetlands in Missouri.

Four Web sites providing information on Missouri's wetlands and efforts to restore wetlands are given below:

<http://www.dnr.mo.gov/env/wrc/wetlands.htm>

<http://www.mdc.mo.gov/landown/wetland/wetmng>

<http://www.nrcs.usda.gov/programs/wrp/states/mo.html>

<http://www.fws.gov/midwest/BigMuddy/>

The following website provides access to the Missouri Resource Assessment Partnership (MoRAP) program which calculated the figure of 113,000 wetland acres in Missouri. It is a sum of two categories of land cover, "Swamp" and "Marsh and Wet Herbaceous Vegetation". The relatively small total may be the result of a stricter definition of these categories than is necessary to put land under easement.

www.cerc.usgs.gov/morap/Projects.aspx?ProjectId=2

CHAPTER 4. GROUNDWATER ASSESSMENT

BACKGROUND

Less than half of Missourians rely on groundwater as the source of their drinking water. Groundwater is the major source of drinking water in the Ozarks and the Southeast Lowlands for both public and private supplies. The cities of St. Joseph, Independence, Columbia and St. Charles use groundwater from the alluvial aquifer of the Missouri River. In the plains region of the state, many small communities are able to obtain adequate water from shallow alluvial wells near rivers or large creeks, and many individual households still rely on the upland shallow aquifer even though it yields only very small amounts of water.

In the Ozarks, groundwater yields are usually large and of excellent quality, as witnessed by the fact that unlike cities in other areas of the state, many municipalities pump groundwater directly into their water supplies without treatment. However, the geologic character of the Ozarks that supplies it with such an abundance of groundwater, namely its ability to funnel large amounts of rainfall and surface runoff to the groundwater system, can present problems for groundwater quality. This is because much surface water flows directly to groundwater through cracks, fractures or solution cavities in the bedrock, with little or no filtration. Contaminants from leaking septic tanks or storage tanks, or surface waters affected by domestic wastewater, animal feedlots and other pollution sources can move directly into groundwater through these cavities in the bedrock.

As in the Ozarks, groundwater in the southeast lowlands is abundant and of good quality. Unlike the Ozarks, contaminants are filtered by thick deposits of sand, silt and clay as they move through the groundwater system. Thus, while shallow groundwater wells are subject to the same problems with elevated levels of nitrate or bacteria as are found locally in the Ozark aquifer and can also have low levels of pesticides, deep wells are generally unaffected by contaminants.

Shallow groundwater in the plains of northern and western Missouri tends to be somewhat more mineralized and to have taste and odor problems due to high levels of iron and manganese. Like shallow wells in the southeast lowlands, wells in this part of the state can be affected by nitrates, bacteria or pesticides.

In urban areas, alluvial aquifers of large rivers such as the Missouri and the Meramec that serve water supplies have occasionally been locally contaminated by spills or improper disposal of industrial or commercial chemicals.

WELL CONSTRUCTION AND GROUNDWATER QUALITY

Well water quality is greatly influenced by well construction. Public drinking water wells and many private wells are deep, and properly cased and grouted. These wells rarely become contaminated. However, many private wells are shallow or not properly cased. These wells can be easily contaminated by septic tanks, feedlots or chemical mixing sites near the well. Studies in Missouri have shown that two-thirds of wells contaminated by pesticides are less than 35 feet deep. The three most common problems in private wells are bacteria, nitrate and pesticides. Groundwater studies in Missouri indicate that about 30 percent of private wells occasionally exceed drinking water standards for bacteria, 30 percent for nitrate and about five percent for pesticides. State regulations include standards for construction and wellhead protection for all new wells.

MAJOR POTABLE AQUIFERS IN MISSOURI

The location of the major aquifers providing drinkable water in Missouri are described below. The unconfined aquifers are those under water table conditions (the pressure at the water table is the atmospheric pressure). These unconfined aquifers tend to yield greater amounts of water, but are also more easily contaminated by activities occurring at the land surface. In confined aquifers, the upper level of the saturated zone is restricted so that the pressure level is greater than exists at that level of saturation. Confined aquifers are generally recharged more slowly than unconfined aquifers but are better protected from surface contaminants.

Glacial Till Aquifer

This aquifer covers most of Missouri north of the Missouri River. Glacial till is an unsorted mixture of clay, sand and gravel, with occasional boulders and lenses of sand or gravel. Loess, fine wind-blown silt deposits four to eight feet in depth, cover the till on the uplands. In places, the till is underlain by sorted deposits of sand or gravel. Although this aquifer is unconfined, surface water infiltrates very slowly and groundwater yields are very small. In scattered areas the till has buried old river channels that remain as large sand or gravel deposits that contain much more groundwater than the till. Some households still rely on this aquifer for drinking water, but it is generally inadequate as a source for municipal water supply.

Alluvial Aquifer

Alluvial aquifers are the unconfined aquifers on floodplains of rivers and are of Quaternary age. In Missouri, the largest of these aquifers lie along the Missouri and Mississippi rivers, reaching their widest extent in the southeast lowlands where they extend for as much as 50 miles west of the Mississippi River. Many small communities north of the Missouri River use the alluvial aquifers of nearby streams for their drinking water supply, and the Missouri River alluvium supplies the cities of St. Joseph, Independence and Columbia and sections of St. Charles County. In the southeast lowlands, most private water supplies and about 45 percent of people served by public water supplies use water from the alluvial aquifer. Agricultural irrigation consumes about five times more water in this area of Missouri than does domestic water use. All agricultural irrigation water is drawn from the alluvial aquifer.

Wilcox-McNairy Aquifer

These two aquifers lie beneath much of the alluvial aquifer of the southeast lowlands. They are in unconsolidated or loosely consolidated deposits of marine sands and clays of Tertiary and Cretaceous age. Except where the McNairy aquifer outcrops in the Benton Hills and along Crowley's Ridge, these aquifers are confined. They yield abundant amounts of good quality water, and they provide the water for 55 percent of people served by public supplies. In the southeastern part of this region, the deeper of these aquifers, the McNairy, becomes too mineralized to be used for drinking water supply. These two aquifers appear to be unaffected by contaminants of human origin.

Ozark-St. Francois Aquifer

This aquifer covers most of the southern and central two-thirds of Missouri. It is composed of dolomites and sandstones of Ordovician and Cambrian age. Most of the aquifer is unconfined. This aquifer is used for almost all public and private drinking water supplies in this area of Missouri. Exceptions would include supplies in the St. Francois Mountains, such as Fredericktown and Ironton, where the aquifer has been lost due to geologic uplift and erosion, and in Springfield, where demand is so heavy that groundwaters are supplemented with water from three large reservoirs and the James River.

Yields and water quality are typically very good, but in many areas, the bedrock is highly weathered, contains many solution cavities, and can transmit contaminated surface waters into the groundwater rapidly with little or no filtration. Where the confined portion of the aquifer is overlain only by the Mississippian limestones of the Springfield aquifer, the confined Ozark aquifer continues westward for 80 miles or more as a potable water supply, serving the communities of Pittsburg, Kansas and Miami, Oklahoma. However, where it is also overlain by less permeable Pennsylvanian bedrock, the confined Ozark becomes too mineralized for drinking within 20 to 40 miles.

The unconfined Ozark-St. Francois aquifer is susceptible to contamination from surface sources. Increasing urbanization and increasing numbers of livestock are threats to the integrity of portions of this valuable aquifer.

Springfield Aquifer

This aquifer covers a large portion of southwestern Missouri. It is composed of Mississippian limestones that are, particularly in the eastern portion of the aquifer, highly weathered. The aquifer is unconfined and surface water in many areas is readily transmitted to groundwater. Urbanization and livestock production affect this aquifer. Elevated nitrates and bacterial contamination are common problems in groundwaters of the Springfield aquifer.

GROUNDWATER QUALITY SUMMARY TABLES

Table 11 lists the major sources of groundwater contamination in Missouri, major contaminants, and reasons why these sources are the most important. Table 12 summarizes groundwater quality problems at hazardous waste sites. Table 13 provides information on levels of nitrate, pesticides and other toxic organics in public drinking water wells in a particular Missouri aquifer. Table 14 gives the present status of Missouri's groundwater protection strategy.

Table 10. Major Sources Of Groundwater Contamination.

Contaminant Source	10 Highest Priority Sources (X) ¹	Significant Risk Factors ²	Contaminants ³
Agricultural Activities			
Agricultural chemical facilities			
Animal feedlots			
Drainage wells			
Fertilizer applications	X	A,C,D,E	A
Irrigation practices			
Pesticide applications	X	A,B,C,D,E	B
Storage and Treatment Activities			
Land application	X	A,D,E	A,C
Material stockpiles			
Storage tanks (above ground)			
Storage tanks (underground)	X	A,B,C,D,E	D
Surface impoundments			
Waste piles			
Waste tailings			
Disposal Activities			
Deep injection wells			
Landfills			
Septic systems	X	A,D,E	A,C
Shallow injection wells			

Other			
Hazardous waste generators			
Hazardous waste sites	X	A,B,C,D	B,E,F,G
Industrial facilities	X	A,B,C,E	A,H,I,J
Material transfer operations			
Mining and mine drainage	X	A,E	F
Pipelines and sewer lines			
Salt storage and road salting			
Salt water intrusion	X	C	K
Spills	X	A,B,C,E	B,D,E,H
Transportation of materials			
Urban runoff			
Other sources (please specify)			
Other sources (please specify)			

1 Not in Priority Order

2 A. Human health or environmental toxicity risk

B. Size of population at risk

C. Location of sources relative to drinking water sources

D. Number and/or size of contaminant sources

E. Hydrogeologic sensitivity

3 A. Nitrate

B. Organic Pesticides

C. Pathogens (Bacteria, Protozoa, Viruses)

D. Petroleum Compounds

E. Halogenated Solvents

F. Metals

G. Radionuclides

H. Ammonia

I. Pentachlorophenol

J. Dioxin

K. Salinity/Brine

Table 11. Groundwater Contamination Summary.

Hydrogeologic Setting: All Aquifers

Data Reporting Period: 2006-2007

Source Type	Number of sites	Number of sites that are listed and/or have confirmed releases	Number with confirmed groundwater contamination	Contaminants*	Number of site investigations (optional)	Number of sites that have been stabilized or have had the source removed (optional)	Number of sites with corrective action plans (optional)	Number of sites with active remediation (optional)	Number of sites with cleanup completed (optional)
NPL	26	26	26	1	26	--	--	--	--
CERCLIS (non-NPL)	452	452	38	1	38	--	--	--	--
DOD/DOE	118	37	32	1,2,3,4	32	2	13	14	30
LUST	3,757	295	87	3	61	286	--	1,589	286
RCRA Corrective Action	96	92	52	1,2,3,4	51	41	30	25	20
Underground Injection									
State Sites	325	325	126	1,2,3,4	325	134	134	42	134
Nonpoint Sources ⁽⁵⁾									
Other (specify)									

NPL - National Priority List , DOE- Department of Energy ; DOD- Department of Defense; CERCLIS - Comprehensive Environmental Response, Compensation, and Liability Information System; LUST - Leaking Underground Storage Tanks; RCRA - Resource Conservation and Recovery Act.

* Contaminants

1 - VOAs, SVOAs, Solvents, PCBs, Dioxin, PAHs, Herbicides, Pesticides, Metals, Explosives

2 - VOA, PCB, Pesticides, Dioxin, Metals, Radionuclides, SVOCs, etc.

3 - BTEX, TPH, MTBE, PAHs, Metals, SVOA

4 - Creosote, Pentachlorophenol, Organic Solvents, Chlorinated Solvents, Petroleum, Asbestos

Table 12. Aquifer Monitoring Data.

Hydrogeologic Setting: Unconfined Ozark Aquifer – Central and South Central Missouri

Data Reporting Period: 2006-2008

Data below are from 50 randomly selected wells that draw from this aquifer. Samples were collected from the well head.

Name of Supply	NO3-N Mg/L	Hardness Mg/L	Cu Ug/L	Cr Ug/L	SO4 Mg/L	Cl Mg/L	Ra PCI/L	
Ripley Co. PWSD #2	<MRL	256	<MRL	3.47	11.6	<MRL	1.1	
Ripley Co. PWSD #2	<MRL		19.1	4.32	10.9	<MRL	0	Chloroform 0.71 ug/L
Versailles	<MRL	456	1.39	<MRL	172	<MRL	01.5	
Versailles	<MRL	437	1.39	<MRL	<MRL	<MRL	.7	
Butler Co. PWSD #1	0.45	237	16.7	<MRL	5.3	<MRL		
Pulaski Co. PWSD #1	0.18	239	3.42	<MRL	16.7	<MRL		Chloroform 0.71 ug/L, bromodi- chloromethane 0.66 ug/L
Hollister	<MRL	253	4.01	1.09	10.8	<MRL	1.2	
Osage Beach	0.11		<MRL	<MRL	<MRL	<MRL	1.1	
Camden Co. PWSD #1	<MRL	258	<MRL	2.01	6.1	<MRL		
Pulaski Co. PWSD #1	0.06	280	<MRL	<MRL	<MRL	<MRL		
California	<MRL			<MRL	12.2	<MRL	0.8	Chloroform 1.28 ug/L
Pleasant Hope	<MRL		<MRL	<MRL	<MRL	<MRL		
Osage Beach	0.11	278	11.4	<MRL	8.7	6.4	0.55	
Osage Beach	0.09	282	12.2	<MRL	6	6.5	0.9	
California	<MRL	234	3.65	<MRL	19	<MRL	0.7	Chloroform 0.67 ug/L, bromo- dichloromethane 0.71 ug/L
Ripley Co. PWSD #1	.75	217	1.22	<MRL	8.6	<MRL		
Ripley Co. PWSD #1	.27	200	1.52	<MRL	5.3	<MRL		
Ripley Co. PWSD #1	.45	215	6.48	<MRL	5.3	6.7	1.0	Lead 1.1 ug/L
Hollister	<MRL	256	7.46	1.19	11	<MRL	3.7	Lead 2.1 ug/L
Franklin Co. PWSD #3	0.13	311	8.9		10.7	5.4		
Butler Co. PWSD #1	0.52	211	5.59	2.72	6.7	8.9		
California	<MRL	296	<MRL	<MRL	11	<MRL	0.8	
Rolla	<MRL		<MRL	<MRL	<MRL	<MRL	0.8	Xylenes 4.36 ug/L, ethylbenzene 0.82 ug/L
West Plains	<MRL		<MRL	<MRL	<MRL	<MRL		
Hollister	<MRL	258	12.4	1.1	15.7	<MRL	3.9	

Name of Supply	NO3-N Mg/L	Hardness Mg/L	Cu Ug/L	Cr Ug/L	SO4 Mg/L	Cl Mg/L	Ra PCI/L	
Osage Beach	0.14	288	4.78	<MRL	5.8	<MRL	0.8	
Osage Beach	0.11	269	1	<MRL	5.2	<MRL	.02	
Hollister	<MRL	246	26.8	1.11	11.3	<MRL	3.4	
Butler Co. PWSD #1	0.48	231	13.1	<MRL	11.8	<MRL		Arsenic 1.17 ug/L, xylenes 1.08 ug/L
Franklin Co. PWSD #3	0.29	308	23.2	<MRL	7.4			
Franklin Co. PWSD #3	<MRL	266	5.18	<MRL	15.2	31.3	0.6	
Texas Co. PWSD #1	0.05	211	6.36	<MRL	6.6	<MRL		
Forsyth	0.05		5.86	1.07	50	<MRL		Lead 1.07 ug/L
Gainesville	<MRL	334	1.61	1	<MRL	<MRL		
Marshfield	0.12		<MRL	<MRL	<MRL	<MRL		
Taney Co. PWSD #3	<MRL	221	2.74	3.18	12.8	<MRL	2.8	Lead 2.57 ug/L
Laclede Co. PWSD #3	0.17	237	<MRL	2.88	9.7	<MRL		
Warsaw	<MRL	268	16.0	<MRL	32.7	7.3	0.5	
Osage Co. PWSD #2	<MRL		<MRL	<MRL		<MRL	1.0	Arsenic 2.76 ug/L
Thayer	0.22	322	2.43	<MRL	6.5	<MRL		
Bolivar	<MRL	200	17.0	<MRL	13	<MRL		Lead 1.24 ug/L
Cole Co. PWSD #4	<MRL		<MRL	<MRL	<MRL	<MRL	1.9	Bromodichloromethane 0.52 ug/L Chlorodibromomethane 0.61 ug/L
Ava	0.16	266	2.38	1.13	<MRL	12.4	2.3	Arsenic 1.76 ug/L
Winona	0.11	193	4.39	<MRL	5.4	<MRL		
Ava	<MRL	263	2.69	1.17	23.1	<MRL		
Laclede Co. PWSD #3	<MRL	190	<MRL	2.76	12.1	<MRL	2.5	
Bolivar	0.18	200	1.12	1.32	5.5	<MRL		
Forsyth	<MRL	290	11.1	1.51	7.1	<MRL		Lead 1.1 ug/L
Richland	<MRL		<MRL	<MRL	<MRL	<MRL	2.0	
Ripley Co. PWSD #3	0.45	195	<MRL	<MRL	<MRL	<MRL	0.1	
Ripley Co. PWSD #1	0.19	280	3.54	<MRL	8.2	6.4		

Table 13. Summary Of Groundwater Protection Programs.

Program or Activities	Check (X)	Implementation Status	Responsible State Agency
Active SARA Title III Program	X	Fully Established	MDPS/SEMA
Ambient Groundwater Monitoring System		NA	
Groundwater Monitoring at Sanitary Landfills	X	Fully Established	DNR
Groundwater-Level Observation Network	X	Fully Established	DNR
Aquifer Vulnerability Assessment		NA	
Aquifer Mapping and Characterization	X	Continuing Effort	DNR
Comprehensive Data Management System		NA	
EPA-endorsed Core Comprehensive State Groundwater Protection Program (CSGWPP)		NA	
Groundwater Discharge Permits	X	Fully Established	DNR
Groundwater Best Management Practices (BMPs)	X	Continuing Effort	DNR
Groundwater Legislation	X	Developed	DNR
Groundwater Classification		NA	
Groundwater Quality Standards	X	Fully Established	DNR
Interagency Coordination for Groundwater Protection Initiatives	X	Fully Established	DNR
Nonpoint source controls	X	Continuing Effort	DNR
Pesticide State Management Plan	X	Developed	MDA
Pollution Prevention Program	X	Continuing Effort	DNR
Resource Conservation and Recovery Act (RCRA) Primacy	X	Fully Established	DNR
State Superfund	X	Fully established	DNR
State RCRA Program Incorporating More Stringent Requirements than RCRA Primacy	X	Fully Established	DNR
State Septic System Regulations	X	Fully Established	MDHSS
Underground Storage Tank Installation Requirements	X	Fully Established	DNR
Underground Storage Tank Remediation Fund		NA	
Underground Storage Tank Permit Program		NA	
Underground Injection Control Program	X	Fully Established	DNR
Vulnerability Assessment for Drinking Water/Wellhead Protection	X	Fully Established	DNR
Well Abandonment Regulations	X	Fully Established	DNR
Wellhead Protection Program (EPA-approved)	X	Fully Established	DNR
Well Installation Regulations	X	Fully Established	DNR

MDPS/SEMA = Missouri Department of Public Safety, State Emergency Management Agency

MDA = Missouri Department of Agriculture

MDHSS = Missouri Department of Health & Senior Services

Notes:

Active SARA Title III Program: This program is administered by the Missouri Department of Public Safety, State Emergency Management Agency.

Ambient Groundwater Monitoring System: There is no system per se. The state has participated in several opportunities to monitor ambient groundwater, such as impact analyses following the floods of 1993.

Groundwater Monitoring at Sanitary Landfills: The department's Solid Waste Management Program oversees monitoring at sanitary landfills.

Groundwater-Level Well Observation Network: Established in 1951, this network is operated by the department's Water Resources Center and currently consists of 75 wells.

Aquifer Vulnerability Assessment: The department does not have a specific program in place, but the department's Water Resources Center collects groundwater supply data and performs resource assessments.

Aquifer Mapping and Characterization: The Water Resources Center participates in aquifer mapping. No present systematic activity is done, although these activities may be conducted in concert with hazardous substance release investigations. The department's Public Drinking Water Branch is currently working with the Water Resources Center to perform aquifer monitoring and characterization to delineate which aquifer zones are responsible for the highest concentration of radionuclides. In addition, the U.S. Geological Survey has done considerable work on aquifer characteristics.

Comprehensive Data Management System: None.

EPA-endorsed Core Comprehensive State Groundwater Protection Program: No formal program has been established.

Groundwater Discharge Permits: Underground Injection Control permits are issued jointly by the department's Division of Geology and Land Survey and Water Protection Program.

Groundwater Best Management Practices: Some BMPs are established as part of the Nonpoint Source Management Plan. The Soil and Water Conservation Program also provides cost-share to help agricultural landowners install BMPs on their land.

Groundwater Legislation: The Cave Resources Act and Clean Water Law deal directly with groundwater. Other laws, such as the Dead Animal Disposal Statute, prescribe protections for groundwater. There is no comprehensive groundwater protection statute per se.

Groundwater Classification: There is no classification system at this time, although it has been proposed in the past.

Groundwater Quality Standards: Standards have been established as part of state water quality standards.

Interagency Coordination for Groundwater Protection Initiatives: Opportunities for monthly coordination are provided through the Water Quality Coordinating Committee.

Nonpoint Source Controls: The nonpoint source management program provides guidance for voluntary controls. In addition, the department's Soil and Water Conservation Program provides cost-share for soil and water conservation.

Pesticide State Management Program: A general pesticide and water quality management plan was prepared by the Missouri Department of Agriculture in conjunction with the Missouri Department of Natural Resources. The plan addresses both groundwater and surface water, and has been concurred with by EPA.

Pollution Prevention Program: The department uses outreach and assistance to educate Missourians on pollution prevention.

Resource Conservation and Recovery Act (RCRA) Primacy: RCRA is administered by the department's Hazardous Waste Program.

State Superfund: This program is administered by the department's Hazardous Waste Program, and provides for a state registry of confirmed abandoned hazardous waste disposal sites.

State RCRA Program Incorporating More Stringent Requirements than RCRA Primacy: Requirements are administered by the department's Hazardous Waste Program.

State Septic System Regulations: Regulations are administered by the Department of Health & Senior Services.

Underground Storage Tank Installation Requirements: Requirements are administered by the department's Hazardous Waste Program.

Underground Storage Tank Remediation Fund: The department does not have an underground storage tank remediation fund, but does have a similar fund called the Petroleum Storage Tank Insurance Fund. It was initially established to provide underground storage tank owners and operators with assistance in meeting state and federal financial responsibility requirements. It has since been amended, broadening eligibility and expanding benefits.

Underground Storage Tank Permit Program: Tanks are required to be registered but not permitted.

Underground Injection Control Program: The program is administered by the department's Division of Geology and Land Survey.

Vulnerability Assessment for Drinking Water/Wellhead Protection: Assessments are administered by the department's Water Protection Program. A vulnerability assessment of Missouri drinking water to chemical contamination was conducted and implemented in 1991.

Well Abandonment Regulations: Regulations are administered by the department's Division of Geology and Land Survey.

Wellhead Protection Program (EPA-approved): This program is administered by the department's Water Protection Program.

Well Installation Regulations: Regulations are administered by the department's Water Protection Program.

For more information, call the Department of Natural Resources at (573) 751-1300.

Appendix I Impaired or Potentially Impaired Waters of Missouri

Table 14. 2008 Missouri Section 303(d) List,
As Approved by the Missouri Clean Water Commission,
May 6, 2009

Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County
2002	Bear Cr.	0115U-01	U	2.0	n/a	Mi	Unknown	Unknown	1G		40.1585	-92.5644	40.1436	-92.5374	Adair
2008	Bee Fk.	2760	C	8.5	8.5	Mi.	Lead	Fletcher Mine	1	2,4	37.4426	-91.0915	37.4438	-91.0758	Reynolds
2006	Bee Fk.	2760	C	0.9	8.5	Mi.	Toxicity	Fletcher Mine	1G	2,4	37.4426	-91.0915	37.4438	-91.0758	Reynolds
2008	Bee Fk.	2760U-01	U	0.3	n/a	Mi.	Toxicity	Fletcher Mine	1G		37.4415	-91.0942	37.4426	-91.0915	Reynolds
2006	Belcher Branch Lake	7365	L3	55.0	55	Ac.	Mercury(T)	Atmospheric Dep.	1G	2,4,5	39.5895	-94.7344	39.5828	-94.7318	Buchanan
2008	Big Bottom Cr.	1746	C	0.5	1.9	Mi.	Ammonia	Lake Forest WWTP	1	4	37.9561	-90.2084	37.9615	-90.2087	Ste. Genevieve
2006	Big Bottom Cr.	1746	C	1.7	1.9	Mi.	Low D.O.	Lake Forest WWTP	1	4	37.9561	-90.2084	37.9746	-90.1993	Ste. Genevieve
2008	Big Bottom Cr.	1746	C	0.5	1.9	Mi.	Org. Sediment	Lake Forest WWTP	1	4	37.9561	-90.2084	37.9615	-90.2087	Ste. Genevieve
2006	Big Cr.	0444	P	1.0	22	Mi	Ammonia	Bethany WWTP	1	2,3,4	40.2554	-94.0618	40.2464	-94.0694	Harrison
2006	Big Cr.	0444	P	6.0	22	Mi	Low D.O.	Bethany WWTP	1	2,3,4	40.2554	-94.0618	40.2057	-94.0774	Harrison
2006	Big Otter Cr. Trib.	1225	C	1.0	1	Mi.	Low D.O.		1	2,4	38.2053	-93.7188	38.2148	-93.7278	Henry
1998	Big R.	2074	P	53.0	53	Mi.	Lead	Mill tailings (Aban.)	1	2,4,5,6,7	38.1598	-90.7052	38.4716	-90.6181	Jefferson
2006	Big R.	2080	P	18.6	68	Mi.	Cadmium (S)	Mill tailings (Aban.)	1G	2,4,7	37.8722	-90.5885	37.9676	-90.5339	St. Francois
2006	Big R.	2080	P	18.6	68	Mi.	Zinc (S)	Mill tailings (Aban.)	1G	2,4,7	37.8722	-90.5885	37.9676	-90.5339	St. Francois
2006	Big R.	2080	P	44.1	68	Mi.	Lead (S)	Mill tailings (Aban.)	1G	2,4,7	37.8722	-90.5885	38.1000	-90.6806	St. Fran./Jefferson
1994	Big R.	2080	P	48.7	68	Mi.	Lead (T)	Mill tailings (Aban.)	1G	2,4,7	37.8752	-90.5505	38.1599	-90.7053	St. Fran./Jefferson
1994	Big R.	2080	P	55.0	68	Mi.	Inorg. Sediment	Mill tailings (Aban.)	1G	2,4,7	37.8726	-90.5886	38.1601	-90.7046	St. Fran./Jefferson
2008	Black R.	2784	P	35.0	35	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,3,4,5,6	37.1353	-90.7720	36.8256	-90.4224	Wayne/Butler
2006	Blackberry Cr.	3184	C	3.5	6.5	Mi.	Chloride	Asbury PP	1	2,4	37.3279	-94.5707	37.2877	-94.5618	Jasper
2008	Blackberry Cr.	3184	C	3.5	6.5	Mi.	Sulfate Chloride	Asbury PP	1	2,4	37.3279	-94.5707	37.2877	-94.5618	Jasper
2006	Blue R.	0417	P	4.0	4	Mi.	Bacteria	Urban NPS	2	1,4,5,7	39.1182	-94.4914	39.1304	-94.4694	Jackson
2006	Blue R.	0418	P	9.0	9	Mi.	Bacteria	Urban NPS	2	1,4,5,7	39.0244	-94.5247	39.0895	-94.4884	Jackson

Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County
2006	Blue R.	0419	P	9.0	9	Mi.	Bacteria	Urban NPS	2	1,4,5	38.9571	-94.5592	39.0089	-94.5212	Jackson
2006	Blue R.	0421	C	11.0	11	Mi.	Bacteria	Urban NPS	2	1,4,5	38.8504	-94.6080	38.9570	-94.5594	Jackson
2006	Bobs Cr.	0035	C	3.5	12.5	Mi.	Low D.O.	Lincoln Co. WWTF	1	2,4	38.9861	-90.8701	38.9761	-90.8208	Lincoln
2006	Bonne Femme Cr.	0750	P	7	7	Mi	Bacteria	Urban/Rural NPS	2	1,4	38.8357	-92.3047	38.7915	-92.3798	Boone
2008	Bourbeuse R.	2034	P	132.0	132	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,3,4,5,6	38.1322	-91.5983	38.3991	-90.8990	Phelps/Franklin
2002	Brush Cr.	1371	P	4.0	4	Mi.	Low D.O.	Humansville WWTP	1	2,4	37.7922	-93.5904	37.8349	-93.6327	Polk/St. Clair
2002	Brush Cr.	1371	P	4	4	Mi.	Org. Sediment	Humansville WWTP	1	2,4	37.7922	-93.5904	37.8349	-93.6327	Polk/St. Clair
1994	Buffalo Ditch	3118	P	3.0	18	Mi.	Low D.O.	Kennett WWTP	1	2,4	36.2001	-90.0614	36.1609	-90.0826	Dunklin
2006	Burgher Branch	1865	C	2.0	2	Mi.	Low D.O.		1	4	37.9434	-91.7457	37.9320	-91.7262	Phelps
2006	Busch Lake #35	7057	L3	51.0	51	Ac	Mercury (T)	Atmospheric Dep.	1G	4.5	38.7132	-90.7318	38.7199	-90.7235	St. Charles
2006	Capps Cr.	3234	P	4.0	4	Mi.	Bacteria	Rural NPS	2	1,3,4,5,6	36.8835	-94.0261	36.8884	-94.0935	Barry
1998	Cave Spring Br.	3245U-01	U	0.2	n/a	Mi.	Nutrients	Simmons Ind.	G		36.5478	-94.6142	36.5477	-94.6178	McDonald
2008	Cedar Cr.	1344	P	10.0	27	Mi.	Unknown	Unknown	1G	2,4,5,6	37.6741	-93.9082	37.7572	-93.8754	Cedar
2008	Cedar Cr.	1357	C	16.5	16.5	Mi.	Unknown	Unknown	1G	2,4	37.5312	-93.9866	37.6741	-93.9082	Cedar
2008	Cedar Cr.	0737	C	7.0	33	Mi	Unknown	Unknown	1G	2,4	39.0265	-92.1391	38.9524	-92.1517	Callaway
2006	Cedar Cr. Trib.	0743	C	1.5	1.5	Mi.	Low D.O.		1	2,4	39.0263	-92.1113	39.0218	-92.1300	Callaway
2006	Center Cr.	3203	P	12.8	26	Mi.	Cadmium (W)	Mill Tailings (Aban.)	1	2,4,5,6,7	37.1755	-94.4549	37.1508	-94.6172	Jasper
2006	Center Cr.	3203	P	12.8	26	Mi.	Cadmium (S)	Mill tailings (Aban.)	1G	2,4,5,6,7	37.1755	-94.4549	37.1508	-94.6172	Jasper
2006	Center Cr.	3203	P	12.8	26	Mi.	Lead (S)	Mill tailings (Aban.)	1G	2,4,5,6,7	37.1755	-94.4549	37.1508	-94.6172	Jasper
2006	Center Cr.	3203	P	12.8	26	Mi.	Zinc (S)	Mill tailings (Aban.)	1G	2,4,5,6,7	37.1755	-94.4549	37.1508	-94.6172	Jasper
2008	Center Cr.	3210	P	22.0	22	Mi.	Bacteria	Rural NPS	2	1,4,5,6,7	37.0370	-94.0753	37.1053	-94.3090	Newton/Jasper
2006	Chariton R.	0640	P	40.0	110	Mi.	Bacteria	Rural NPS	2	1,4,5,6	39.8014	-92.6802	39.3130	-92.9580	Macon/Chariton
2006	Clear Cr.	3238	P	9.0	9	Mi.	Bacteria		2	1,4	36.9422	-93.9997	36.9354	-94.1495	Barry/Newton
2006	Clear Cr.	3239	C	2.0	2	Mi.	Low D.O.	Monett WWTP	1	2,4	36.9204	-93.9490	36.9422	-93.9997	Barry/Newton
2002	Clear Cr.	3239	C	2.0	2	Mi.	Nutrients	Monett WWTP	G	2,4	36.9204	-93.9490	36.9422	-93.9997	Barry/Newton
2006	Clear Cr.	1333	P	15.5	15.5	Mi.	Low D.O.		1	2,4	37.8228	-94.1102	37.9953	-93.6520	Vernon/St.Clair
2006	Clear Cr.	1336	C	15.0	15	Mi.	Low D.O.		1	2,4	37.6960	-94.2262	37.8228	-94.1102	Vernon
2006	Clear Fk.	0935	P	3.0	24.5	Mi.	Low D.O.	Knob Noster WWTP	1	2,4	38.7702	-93.5928	38.7906	-93.5914	Johnson
2002	Clearwater Lake	7326	L2	1650.0	1650	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4,5	37.1921	-90.7786	37.1353	-90.7721	Reynolds/Wayne
2006	Coldwater Cr.	1706	C	4.0	5.5	Mi.	Low D.O.		1	2,4	38.8135	-90.2908	38.8129	-90.2369	St. Louis

Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County
2006	Coldwater Cr.	1706	C	5.5	5.5	Mi.	Chloride	Urban NPS	1	2,4	38.8135	-90.2908	38.8321	-90.2192	St. Louis
2008	Coldwater Cr.	1706	C	5.5	5.5	Mi.	Bacteria	Urban NPS	2	1,4	38.8135	-90.2908	38.8321	-90.2192	St. Louis
2006	Courtois Cr.	1943	P	2.6	30	Mi.	Lead (W)	Viburnum 29 Mine	1	2,4,5	37.7647	-91.0711	37.7931	-91.0588	Washington
2006	Courtois Cr.	1943	P	2.6	30	Mi.	Metals*** (W)	Viburnum 29 Mine	1G	2,4,5	37.7647	-91.0711	37.7931	-91.0588	Washington
2006	Creve Coeur Cr.	1703	C	2.0	2	Mi.	Bacteria	Urban NPS	2	1,4	38.6702	-90.4921	38.7091	-90.4878	St. Louis
2006	Creve Coeur Cr.	1703	C	2.0	2	Mi.	Chloride	Urban NPS	1	2,4	38.6702	-90.4921	38.7091	-90.4878	St. Louis
2006	Crooked Cr.	1928	P	3.5	3.5	Mi.	Lead (S)	Buick Smelter	1G	2,4	37.6974	-91.1605	37.7142	-91.2049	Dent/Crawford
2006	Crooked Cr.	1928	P	3.5	3.5	Mi.	Cadmium (S)	Buick Smelter	1G	2,4	37.6974	-91.1605	37.7142	-91.2049	Dent/Crawford
2006	Crooked Cr.	1928	P	3.5	3.5	Mi.	Cadmium (W)	Buick Smelter	1	2,4	37.6974	-91.1605	37.7142	-91.2049	Dent/Crawford
2008	Crooked Cr.	1928U-01	U	5.2	n/a	Mi.	Cadmium (W)	Buick Smelter	1G		37.6492	-91.1341	37.6974	-91.1605	Iron/Dent
2006	Current R.	2636	P	118.0	118	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,4,5,6	37.3766	-91.5471	36.4988	-90.8023	Shannon/Ripley
2006	Dardenne Cr.	0219	P1	7.0	7	Mi.	Low D.O.		1	2,4,5	38.8261	-90.6032	38.8612	-90.5367	St. Charles
2006	Dardenne Cr.	0222	C	6.0	6	Mi.	Low D.O.		1	2,4	38.7289	-90.8919	38.7362	-90.7856	St. Charles
2002	Dardenne Cr.	0221	P	1.5	15	Mi.	Inorg. Sediment	Unknown	1G	2,4,5	38.7361	-90.7857	38.7387	-90.7665	St. Charles
2006	Dardenne Cr.	0221	P	15.0	15	Mi.	Unknown		1G	2,4,5	38.7361	-90.7857	38.8270	-90.6024	St. Charles
2006	Dardenne Cr.	0222	C	4.5	6	Mi.	Inorg. Sediment	Unknown	1G	2,4	38.7448	-90.8342	38.7361	-90.7857	St. Charles
2006	Dark Cr.	0690	C	8	8	Mi.	Low D.O.		1	2,4	39.5158	-92.5856	39.4399	-92.6302	Randolph
2002	Deer Ridge Lake	7015	L3	48.0	48	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4,5	40.1747	-91.8276	40.1807	-91.8276	Lewis
2008	Des Moines R.	0036	P	29.0	29.0	Mi.	Bacteria	Mult. Pt. & NPS	2	1,4,5	40.6138	-91.7283	40.3809	-91.4226	Clark
2006	Ditch # 36	3109	P	7	7	Mi.	Low D.O.		1	2,4	36.2720	-89.9928	36.1729	-90.0220	Dunklin
2006	Ditch to Buffalo Ditch	3120	P	12	12	Mi.	Low D.O.		1	2,4	36.2320	-90.0649	36.0987	-90.1595	Dunklin
2006	Douger Branch	3168	C	1	4.5	Mi.	Zinc (S)	Mill Tailings (Aban.)	1G	2,4	36.9755	-93.7145	36.9783	-93.7315	Lawrence
2006	Douger Branch	3168	C	1	4.5	Mi.	Cadmium (W)	Baldwin Park mine	1	2,4	36.9755	-93.7145	36.9783	-93.7315	Lawrence
2006	Douger Branch	3168	C	1	4.5	Mi.	Lead (S)	Mill Tailings (Aban.)	1G	2,4	36.9755	-93.7145	36.9783	-93.7315	Lawrence
2006	Dousinbury Cr.	1180	P	3.5	3.5	Mi.	Bacteria	Rural NPS	2	1,4	37.5729	-92.9025	37.5958	-92.9801	Dallas
2002	Dry Auglaize Cr.	1145	P	7.0	7	Mi.	Unknown	Unknown	1G	2,4	37.6963	-92.6507	37.7791	-92.6233	Laclede
2008	Dry Branch	3189	C	9.0	9	Mi.	Bacteria	Rural NPS	2	1,4	37.2514	-94.2221	37.2929	-94.3591	Jasper
2006	Dutro Carter Cr.	3569	P	0.6	1.5	Mi.	Low D.O.	Rolla SE WWTP	1	2,4	37.9321	-91.7260	37.9318	-91.7170	Phelps
2006	Dutro Carter	3569	P	0.9	1.5	Mi.	Low D.O.	Unknown	1	2,4	37.9306	-91.7403	37.9321	-91.7260	Phelps

	Cr.														
Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County
2008	E. Fk. Black R.	2737	P	0.2	17	Mi.	Hydromod.	Impoundment	1G	2,3,4	37.4950	-90.8371	37.4935	-90.8402	Reynolds
2006	E. Fk. Chariton R.	0682	P	48.5	48.5	Mi.	Sulfate	Multiple AMLs	3	1,2,4,6	39.7530	-92.5186	39.3406	-92.8451	Randolph
2006	E. Fk. Grand R.	0457	P	25.0	25	Mi	Bacteria	Rural NPS	2	1,3,4,5,6	40.4943	-94.3120	40.1973	-94.3602	Worth/Gentry
2008	E. Fk. Locust Cr.	0608	P	13.0	13	Mi	Bacteria	Mult. Pt.& NPS	2	1,4	40.1662	-93.1193	40.0440	-93.1735	Sullivan
2008	E. Fk. Locust Cr.	0610	C	12.6	13	Mi.	Low D.O.	Rural NPS	2	1,4	40.3632	-93.0867	40.2171	-93.1065	Sullivan
2008	E. Fk. Locust Cr.	0610	C	12.6	13	Mi.	Bacteria	Rural NPS	2	1,4	40.3632	-93.0867	40.2172	-93.1066	Sullivan
2008	E. Fk. Locust Cr.	0610	C	0.4	13	Mi	Bacteria	Pt.& NPS	2	1,4	40.2172	-93.1066	40.2120	-93.1062	Sullivan
2006	E. Fk. Medicine Cr.	0619	P	36.0	36	Mi.	Bacteria	Rural NPS	2	1,4	40.5804	-93.3340	40.1021	-93.3755	Putnam/Grundy
2006	E. Fk. Tebo Cr.	1282	C	1.0	12	Mi.	Low D.O.	Windsor SW WWTP	1	2,4	38.5142	-93.5346	38.5005	-93.5297	Henry
2006	Eaton Branch	2166	C	0.9	3**	Mi.	Cadmium (W)	Mill tailings (Aban.)	1	2,4	37.8676	-90.6055	37.8711	-90.5919	St. Francois
2006	Eaton Branch	2166	C	0.9	3**	Mi.	Cadmium (S)	Mill tailings (Aban.)	1G	2,4	37.8676	-90.6055	37.8711	-90.5919	St. Francois
2006	Eaton Branch	2166	C	0.9	3**	Mi.	Zinc (W)	Mill tailings (Aban.)	1	2,4	37.8676	-90.6055	37.8711	-90.5919	St. Francois
2006	Eaton Branch	2166	C	0.9	3**	Mi.	Zinc (S)	Mill tailings (Aban.)	1G	2,4	37.8676	-90.6055	37.8711	-90.5919	St. Francois
2006	Eaton Branch	2166	C	0.9	3**	Mi.	Lead (S)	Mill tailings (Aban.)	1G	2,4	37.8676	-90.6055	37.8711	-90.5919	St. Francois
2996	Eleven Point R.	2597	P	10	10	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,4,5	36.7983	-91.3384	36.7393	-91.2209	Oregon
2008	Eleven Point R.	2601	P	19.0	19	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,4,5	36.8274	-91.5855	36.7984	-91.3386	Oregon
2006	Elm Branch	1283	C	3.0	3	Mi.	Low D.O.		1	2,4	38.5165	-93.5126	38.5006	-93.5294	Henry
2008	Fishpot Cr.	2186	P	2.0	2	Mi.	Bacteria	Urban NPS	2	1,4	38.5592	-90.5255	38.5470	-90.4976	St. Louis
2006	Fishpot Cr.	2186	P	2.0	2	Mi.	Low D.O.		1	2,4	38.5592	-90.5255	38.5470	-90.4976	St. Louis
1994	Flat River Cr.	2168	C	6.0	9	Mi.	Lead (S)	Mill tailings (Aban.)	1G	2,4	37.8235	-90.5439	37.8920	-90.4999	St. Francois
1994	Flat River Cr.	2168	C	6.0	9	Mi.	Lead (T)	Mill tailings (Aban.)	1G	2,4	37.8235	-90.5439	37.8920	-90.4999	St. Francois
1994	Flat River Cr.	2168	C	5.0	9	Mi.	Zinc (W)	Mill tailings (Aban.)	1	2,4	37.8395	-90.5267	37.8920	-90.4999	St. Francois
1994	Flat River Cr.	2168	C	5.0	9	Mi.	Lead (W)	Mill tailings (Aban.)	1	2,4	37.8395	-90.5267	37.8920	-90.4999	St. Francois
1994	Flat River Cr.	2168	C	4.0	9	Mi.	Sediment	Mill tailings (Aban.)	1G	2,4	37.8477	-90.5173	37.8920	-90.4999	St. Francois
2008	Flat River Cr., Trib	2168U-01	U	0.3	n/a	Mi.	Zinc (W)	Mill tailings (Aban.)	1		37.8418	-90.5321	37.8395	-90.5267	St. Francois
2008	Foster Cr.	0747U-01	U	0.5	n/a	Mi.	Ammonia	Ashland WWTP	1		38.7634	-92.2550	38.7574	-92.2501	Boone

Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County
2006	Fowler Cr.	0747	C	6	6	Mi.	Low D.O.		1	2,4	38.7684	-92.2210	38.7133	-92.2171	Boone
2008	Fox R.	0038	P	27.0	27	Mi.	Bacteria	Rural NPS	2	1,4,5	40.6070	-91.9161	40.3714	-91.5884	Clark
2002	Gasconade R.	1455	P	249.0	249	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,3,4,5	38.6745	-91.5484	37.2120	-92.5182	Gascon./Wright
2006	Grand Glaize Cr.	2184	C	4.0	4	Mi.	Chloride	Urban NPS	1	2,4	38.5713	-90.4696	38.5528	-90.4634	St. Louis
2008	Grand Glaize Cr.	2184	C	4.0	4	Mi.	Bacteria	Urban NPS	2	1,4	38.5713	-90.4696	38.5528	-90.4634	St. Louis
2002	Grand Glaize Cr.	2184	C	4.0	4	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,4	38.5713	-90.4696	38.5528	-90.4634	St. Louis
2006	Grand R.	0593	P	60.0	60	Mi	Bacteria	Rural NPS	2	1,3,4,5,6	39.7406	-93.5322	39.3855	-93.1075	Livin./Chariton
2008	Gravois Cr.	1712	P	2.0	2	Mi.	Chloride	Urban NPS	1	2,4	38.5408	-90.2990	38.5481	-90.2719	St. Louis
2006	Gravois Cr.	1712	P	2.0	2	Mi.	Bacteria	Urban NPS	2	1,4	38.5408	-90.2990	38.5481	-90.2719	St. Louis
2006	Gravois Cr.	1713	C	4.0	4	Mi.	Chloride	Urban NPS	1	2,4	38.5472	-90.3482	38.5408	-90.2990	St. Louis
2006	Gravois Cr.	1713	C	4.0	4	Mi.	Low D.O.	Unknown	1	2,4	38.5472	-90.3482	38.5408	-90.2990	St. Louis
2006	Gravois Cr.	1713	C	4.0	4	Mi.	Bacteria	Urban NPS	2	1,4	38.5472	-90.3482	38.5408	-90.2990	St. Louis
2006	Grindstone Cr.	1009	C	1.5	1.5	Mi.	Bacteria	Unknown	2	1,4	38.9287	-92.2930	38.9277	-92.3220	Boone
2008	Hazel Cr. Lake	7152	L1	151.0	151	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,3,4	40.2747	-92.6325	40.2996	-92.6291	Adair
2008	Heath's Cr.	0848	P	13	13	Mi.	Low D.O.	Unknown	1	2,4	38.9054	-93.2155	38.9218	-93.0189	Pettis
2002	Hickory Cr.	0442	C	1.5	1.5	Mi.	Unknown		1G	2,4	40.0291	-94.0130	40.0203	-94.0304	Daviess
2006	Hickory Cr.	3226	P	4.5	4.5	Mi.	Bacteria	Unknown	2	1,4	36.8524	-94.3260	36.8938	-94.3707	Newton
2002	Hickory Cr., Trib	0589	C	1.0	1	Mi.	Unknown		1G	2,4	40.0226	-93.7125	40.0162	-93.7073	Grundy
1998	Hinkson Cr.	1007	P	6.0	6	Mi.	Unknown	Urban Runoff	1G	2,4,5	38.9285	-92.3398	38.9220	-92.4140	Boone
2006	Hinkson Cr.	1008	C	18.0	18	Mi.	Bacteria		2	1,4	39.0709	-92.2170	38.9285	-92.3398	Boone
1998	Hinkson Cr.	1008	C	6.3	18	Mi.	Unknown	Urban NPS	1G	2,4	38.9630	-92.2953	38.9285	-92.3398	Boone
2008	Horse Cr.	1348	P	24.5	24.5	Mi.	Unknown	Unknown	1G	2,4,6	37.6442	-94.0779	37.7657	-93.8840	Cedar
2002	Hough Park Lake	7388	L3	7.0	7	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4	38.5425	-92.1831	38.5403	-92.1831	Cole
2002	Indian Cr.	0420	C	3.0	3	Mi.	Bacteria	Mult. Pt.& NPS	2	1,4,7	38.9385	-94.6082	38.9525	-94.5627	Jackson
2006	Indian Cr.	1946	C	1.5	1.5	Mi.	Lead (W)	Viburnum 29 Mine	1	2,4	37.7419	-91.0843	37.7649	-91.0711	Washington
2002	Indian Cr.	1946	C	1.5	1.5	Mi.	Metals*** (W)	Viburnum 29 Mine	1G	2,4	37.7419	-91.0843	37.7649	-91.0711	Washington
2006	Indian Cr.	3256	P	5.0	26.0	Mi.	Bacteria	Rural NPS	2	1,4,5,6	36.7947	-94.2318	36.7593	-94.2721	Newton
2008	Indian Cr. Lake	7389	L3	192.0	192	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4,5	39.9173	-93.6996	39.8968	-93.6955	Livingston
2006	Indian Cr., Trib	3663	C	0.3	.3	Mi.	Lead (W)	Viburnum 29 Mine	1	2,4	37.7590	-91.0798	37.7596	-91.0751	Washington
2006	Indian Cr., Trib	3663	C	0.3	.3	Mi.	Zinc (W)	Viburnum 29 Mine	1	2,4	37.7590	-91.0798	37.7596	-91.0751	Washington
2006	Jordan Cr.	3374	P	3.8	3.8	Mi.	Low D.O.		1	2,4	37.2193	-93.3098	37.1968	-93.3520	Greene
2008	Jordan Cr.	3374	P	3.8	3.8	Mi.	Unknown	Urban NPS	1G	2,4	37.2193	-93.3098	37.1968	-93.3520	Greene
2002	Knob Noster S.P. Lakes, Lake Buteo	7196	L3	10.0	24	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4	38.7464	-93.5791	38.7491	-93.5822	Johnson

Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County
2008	L. Beaver Cr.	1529	C	3.3	4	Mi.	Low D.O.	Rolla SW WWTP	1	2,4	37.9362	-91.8349	37.9046	-91.8593	Phelps
2008	L. Beaver Cr.	1529	C	3.3	4	Mi.	Inorg. Sediment	Smith S&G	1G	2,4	37.9362	-91.8349	37.9046	-91.8593	Phelps
2006	L. Dry Fk.	1863	P	1.0	5	Mi.	Low D.O.	Rolla SE WWTP	1	2,4	37.9387	-91.7112	37.9446	-91.6983	Phelps
2006	L. Dry Fk.	1864	C	0.6	4.5	Mi.	Low D.O.	Rolla SE WWTP	1	4	37.9318	-91.7170	37.9387	-91.7112	Phelps
2008	L. Dry Fk.	1864	C	3.9	4.5	Mi.	Low D.O.		1	4	37.8760	-91.7153	37.9318	-91.7170	Phelps
2006	L. Drywood Cr.	1325	P	17	17	Mi.	Low D.O.		1	2,4	37.6977	-94.3942	37.8628	-94.4016	Vernon
2006	L. Muddy Cr., Trib	3490	C	0.4	.4	Mi.	Color	Tyson Foods	G	1,2,4	38.7669	-93.3037	38.7732	-93.2912	Pettis
2006	L. Muddy Cr., Trib	3490	C	0.4	.4	Mi.	Chloride	Tyson Foods	1	2,4	38.7669	-93.3037	38.7732	-93.2912	Pettis
2006	L. Niangua R.	1189	P	43	43	Mi.	Low D.O.		1	2,4,5	37.8406	-93.0014	38.0616	-92.9030	Dallas/Camden
2008	L. Osage R.	3652	C	16.0	16	Mi.	Bacteria	Rural NPS	2	1,4	37.9918	-94.6140	37.9844	-94.3884	Vernon
1998	L. Osage R.	3652	C	16.0	16	Mi.	Low D.O.		2	1,4	37.9918	-94.6140	37.9844	-94.3884	Vernon
1998	Lake of the Ozarks	7205	L2	50	59520	Ac	Fish Trauma	Truman Dam	1G	2,4,5	38.2617	-93.4036	38.2576	-93.3945	Benton
2002	Lake of the Woods	7436	L3	3.0	3	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4			38.9696	-92.2393	Boone
2008	Lake of the Woods	0419U-01	U	7.0	7	Ac.	Mercury (T)	Atmospheric Dep.	1G		38.9942	-94.5172	38.9959	-94.5206	Jackson
2002	Lake Ste. Louise	7055	L3	87.0	87	Ac.	Bacteria	Urban NPS	2	1,4			38.8000	-90.7908	St. Charles
1994	Lake Taneycomo	7314	L2	1730	1730	Ac.	Low D.O.	Table Rock Dam	1	2,3,4,5	36.5954	-93.3092	36.6582	-93.1239	Taney
2006	Lamine R.	0847	P	54.0	54	Mi.	Bacteria	Unknown	2	1,4,5,6	38.6684	-92.9535	38.9805	-92.8499	Morgan/Cooper
2006	Lat. #2 Main Ditch	3105	P	11.5	11.5	Mi.	Low D.O.		1	2,4	36.7878	-89.9260	36.6288	-89.9399	Stoddard
1998	Lat. #2 Main Ditch	3105	P	11.5	11.5	Mi.	Inorg. Sediment		1G	2,4	36.7878	-89.9260	36.6288	-89.9399	Stoddard
2008	Lat. #2 Main Ditch	3105	P	11.5	11.5	Mi.	Temperature	Channelization	1	2,4	36.7878	-89.9260	36.6288	-89.9399	Stoddard
2006	Locust Cr.	0606	P	36.4	84	Mi.	Bacteria	Rural NPS	2	1,3,4,5	40.5831	-93.1409	40.2074	-93.1653	Putnam/Sullivan
2002	Long Branch	0857	C	4.5	4.5	Mi.	Unknown		1G	2,4	38.7028	-93.5619	38.7152	-93.5005	Johnson/Pettis
2006	Long Branch Cr.	0696	C	2.0	13	Mi.	Low D.O.	Atlanta WWTP	1	2,4	39.8980	-92.4932	39.8764	-92.4900	Macon
2002	Longview Lake	7097	L2	930.0	930	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4,5	38.8804	-94.4899	38.9229	-94.4684	Jackson
2006	Lost Cr.	3278	P	8.5	8.5	Mi.	Bacteria	Rural NPS	2	1,4,5	36.8913	-94.5067	36.8397	-94.6180	Newton
2006	M. Fk. Grand R.	0468	P	25.0	25	Mi.	Bacteria	Rural NPS	2	1,4,5,6	40.5402	-94.3511	40.2144	-94.3893	Worth/Gentry
2008	M. Indian Cr.	3263	P	2.5	2.5	Mi.	Bacteria	Rural NPS	2	1,4	36.8062	-94.1721	36.8182	-94.2036	Newton
2006	Main Ditch	2814	C	1.0	14	Mi.	Ammonia	Poplar Bluff WWTP	1	2,4,6	36.7297	-90.3960	36.7160	-90.3960	Butler
2006	Main Ditch	2814	C	1.0	14	Mi.	pH	Poplar Bluff WWTP	1	2,4,6	36.7297	-90.3960	36.7160	-90.3960	Butler

Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County
2006	Main Ditch	2814	C	10.0	14	Mi.	Temperature	Channelization	1	2,4,6	36.7297	-90.3960	36.5900	-90.4207	Butler
2006	Maline Cr.	1709	C	1.0	1	Mi.	Chloride	Urban NPS	1	4	38.7366	-90.2265	38.7269	-90.2146	St. Louis
2002	Mark Twain Lake	7033	L2	18600.0	18600	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,3,4,5	39.4801	-91.9393	39.5244	-91.6440	Monroe/Ralls
2002	Marmaton R.	1308	P	2	49.5	Mi.	Low D.O.	Ft. Scott WWTP	1	2,4,6	37.8517	-94.6162	37.8597	-94.5896	Vernon
2002	Marmaton R.	1308	P	47.5	49.5	Mi.	Low D.O.		1	2,4,6	37.8597	-94.5896	37.9994	-94.3181	Vernon
2006	McKay Park Lake	7399	L3	6.0	6	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4	38.5588	-92.1955	38.5614	-92.1977	Cole
2002	McKenzie Cr.	2786	P	2.5	6	Mi.	Low D.O.	Piedmont WWTP	1	2,4	37.1388	-90.7069	37.1094	-90.7173	Wayne
2008	Meramec R.	2183	P	22.0	22	Mi.	Lead (S)	Mill tailings (Aban.)	1G	2,3,4,5,7	38.5463	-90.4956	38.3888	-90.3429	St. Louis
2008	Meramec R.	2185	P	15.7	26	Mi.	Lead (S)	Mill tailings (Aban.)	1G	2,3,4,5,7	38.4718	-90.6177	38.5463	-90.4956	St. Louis
2006	Meramec R.	1841	P	37.0	37	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,3,4,5	38.2073	-91.0949	38.4726	-90.6188	Franklin/Jefferson
2006	Miami Cr.	1299	P	18	18	Mi.	Low D.O.		1	2,4	38.2950	-94.4513	38.1452	-94.3354	Bates
2006	Mississippi R.	3152	P	124.5	124.5	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,3,4,5,6,7	36.9822	-89.1337	36.0014	-89.7326	Miss/Pemiscot
1998	Mound Branch	1300	C	10.0	10	Mi.	Low D.O.	Unknown	1	2,4	38.2645	-94.3037	38.1958	-94.3657	Bates
2006	Muddy Cr.	0853	P	1.0	55	Mi.	Color	Tyson Foods	G	1,2,4	38.7718	-93.2745	38.7677	-93.2573	Pettis
2008	Muddy Cr.	0853	P	55.0	55	Mi.	Unknown	Unknown	1G	2,4	38.6837	-93.4803	38.8464	-93.0563	Pettis
2006	Muddy Cr.	0853	P	39	55	Mi.	Chloride	Mult Pt. Sources	1	2,4	38.7521	-93.2772	38.8464	-93.0563	Pettis
2006	Mussel Fork Cr.	0674	C	29.0	29	Mi.	Bacteria	Rural NPS	2	1,3,4	40.2071	-92.8880	39.8450	-92.8382	Sullivan/Macon
2006	N. Fk. Cuivre R.	0170	C	8	8	Mi.	Low D.O.		1	2,4	39.2434	-91.2423	39.1689	-91.1854	Pike
2006	N. Fk. Spring R.	3188	C	26.5	51.5	Mi.	Low D.O.	Lamar WWTP & NPS	1	2,4	37.4936	-94.2928	37.2879	-94.3703	Barton/Jasper
2008	N. Fk. Spring R.	3186	P	14.5	14.5	Mi.	Bacteria	Rural NPS	2	1,4,5	37.2881	-94.3703	37.2684	-94.5352	Barton
2008	N. Fk. Spring R.	3188	C	51.5	51.5	Mi.	Bacteria	Rural NPS	2	1,4	37.3257	-94.0304	37.2879	-94.3703	Dade/Jasper
2006	N. Fk. Spring R.	3188	C	51.5	51.5	Mi.	Unknown	Unknown	1G	2,4	37.3257	-94.0304	37.2879	-94.3703	Dade/Jasper
2008	N. Indian Cr.	3260	P	5.0	5	Mi.	Bacteria	Rural NPS	2	1,4	36.8380	-94.1720	36.7949	-94.2320	Newton
2006	Niangua R.	1170	P	51	51	Mi.	Bacteria	Rural NPS	2	1,4,5	37.4462	-92.9196	37.7340	-92.8614	Dallas
2006	No Cr.	0550	P	22.5	22.5	Mi.	Bacteria	Rural NPS	2	1,4	40.1772	-93.4470	39.8875	-93.5700	Grundy/Livin.
2002	Noblett Lake	7316	L3	26.0	26	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4	36.9119	-92.0929	36.9080	-92.1032	Douglas
2006	Panther Cr.	1373	C	7.8	7.8	Mi.	Low D.O.		1	2,4	37.7949	-93.5259	37.8342	-93.6332	St.Clair/Polk
2006	Pearson Cr.	2373	P	2.0	8	Mi.	Bacteria	Mult. Pt. & NPS	2	1,4	37.1871	-93.2009	37.1635	-93.1965	Greene
1998	Pearson Cr.	2373	P	2.0	8	Mi.	Unknown	Unknown	1G	2,4	37.1871	-93.2009	37.1635	-93.1965	Greene
2002	Peruque Cr.	0217	P	4	4	Mi.	Inorg. Sediment	Urban/Rural NPS	1G	2,4	38.7979	-90.8601	38.7867	-90.8037	St. Charles
2002	Peruque Cr.	0218	C	8.5	8.5	Mi.	Inorg.	Urban/Rural NPS	1G	2,4	38.8133	-90.9925	38.7979	-90.8601	St. Charles

							Sediment								
Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County
2008	Phillips Lake	1003U-01	U	32.0	32	Ac.	Mercury (T)	Atmospheric Dep.	1G		38.9006	-92.2899	38.8970	-92.2938	Boone
2006	Pickle Cr.	1755	P	7.0	7	Mi.	pH	Atmospheric Dep.	1	2,4	37.8083	-90.2914	37.8371	-90.2036	Ste. Genevieve
2008	Pike Cr.	2815	C	1.3	3	Mi.	Temperature	Channelization	1	2,4,6	36.7350	-90.4130	36.7296	-90.3961	Butler
1998	Piper Cr.	1444	P	1.0	7.5	Mi.	Organic Sediment	Bolivar WWTP, Unknown	1G	2,4	37.6166	-93.3901	37.6299	-93.3833	Polk
2006	Piper Cr.	1444	P	7.5	7.5	Mi.	Unknown	Unknown	1G	2,4	37.6004	-93.4042	37.6794	-93.4054	Polk
1998	Pond Cr., Trib	2128	C	1.0	1	Mi.	Inorg. Sediment	Barite Tailings Pond	1G	2,4	37.9516	-90.6820	37.9648	-90.6760	Washington
2006	Red Oak Cr.	2038	C	2.0	9	Mi.	Low D.O.	Owensville WWTP	1	2,4	38.3406	-91.4404	38.3373	-91.4086	Gasconade
2006	Red Oak Cr., Trib.	3360	C	0.5	0.5	Mi.	Low D.O.	Owensville WWTP	1	2,4	38.3442	-91.4485	38.3405	-91.4404	Gasconade
2006	Red Oak Cr., Trib.	3361	C	1.5	1.5	Mi.	Low D.O.	Owensville WWTP, NPS	1	4	38.3503	-91.4780	38.3442	-91.4485	Gasconade
2006	R. des Peres	1711	C	1.0	1	Mi.	Chloride	Urban NPS	1	4	38.5596	-90.2829	38.5483	-90.2716	St. Louis
2006	R. des Peres	1711U-01	U	2.5	n/a	Mi.	Chloride	Urban NPS	1G		38.6740	-90.3427	38.6616	-90.3100	St. Louis
2006	S. Blackbird Cr.	0655	C	5	13	Mi.	Ammonia	Unknown	1	2,4	40.4286	-92.9564	40.4165	-92.8886	Putnam
2006	S. Fk. Salt R.	0142	C	17.9	32	Mi.	Low D.O.		1	2,3,4	39.0498	-91.8401	39.1900	-91.8753	Callaway/Audrain
2006	S. Grand R.	1249	P	62.5	62.5	Mi.	Bacteria	Rural NPS	2	1,4,5	38.6675	-94.5318	38.3318	-93.8014	Cass/Henry
2008	S. Indian Cr.	3259	P	9.0	9	Mi.	Bacteria	Rural NPS	2	1(CDF),4	36.7483	-94.1291	36.7949	-94.2320	McDonald/Newton
2008	Salt R.	0091	P	29.0	29	Mi.	Low D.O.	Rereg. Dam	1	2,3,4,5,6	39.5652	-91.5708	39.5218	-91.2027	Ralls/Pike
2002	Salt R.	0091	P	29.0	29	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,3,4,5,6	39.5652	-91.5708	39.5218	-91.2027	Ralls/Pike
2002	Sandy Cr.	0652	C	3.0	3	Mi.	Unknown	Unknown	1G	2,4	40.5037	-92.8466	40.4996	-92.8131	Putnam
2002	Schuman Park Lake	7280	L3	5.0	5	Ac.	Mercury (T)	Atmospheric Dep.	1G	2,4	37.9553	-91.7664	37.9555	-91.7684	Phelps
2008	Scroggins Br.	2916U-01	U	0.5	n/a	Mi.	Cadmium (W)	Glover Smelter site	1G		37.4829	-90.6968	37.4790	-90.6884	Iron
2008	Scroggins Br.	2916U-01	U	0.5	n/a	Mi.	Zinc (W)	Glover Smelter site	1G		37.4829	-90.6968	37.4790	-90.6884	Iron
1994	Shaw Branch	2170	C	2.0	2	Mi.	Inorg. Sediment	Federal AML	1G	2,4	37.8335	-90.5171	37.8478	-90.5171	St. Francois
1994	Shaw Branch	2170	C	2.0	2	Mi.	Lead (S)	Federal AML	1G	2,4	37.8335	-90.5170	37.8478	-90.5171	St. Francois
2006	Shaw Branch	2170	C	2.0	2	Mi.	Cadmium (S)	Federal AML	1G	2,4	37.8335	-90.5170	37.8478	-90.5171	St. Francois
1998	Shibboleth Cr.	2120	C	3.0	3	Mi.	Inorg. Sediment	Mill tailings (Aban.)	1G	2,4	38.0075	-90.7079	38.0209	-90.6639	Washington
2008	Shoal Cr.	3222	P	43.5	43.5	Mi.	Bacteria	Rural NPS	2	1,3,4,5,6	36.8917	-94.0977	37.0328	-94.6179	Newton
2006	Shoal Cr.	3231	C	4	4	Mi.	Low D.O.		1	2,4	36.6741	-93.9768	36.7289	-94.0129	Barry
2006	Sni-a-bar Cr.	0399	P	32	32	Mi.	Low D.O.		1	2,4,5	38.9428	-94.1665	39.1406	-93.9688	Jackson/Lafayette
1994	Spring Branch	3708	P	7.4	7.4	Mi.	Org. Sediment		1G	4	37.6353	-91.5183	37.6977	-91.5685	Dent

Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County
1994	Spring Branch	3708	P	7.4	7.4	Mi.	Low D.O.	Pt/NPS	1	4	37.6353	-91.5183	37.6977	-91.5685	Dent
2006	Spring R.	3160	C	58.5	58.5	Mi.	Bacteria	Rural NPS	2	1,4,5,6,7	37.1210	-93.8959	37.1946	-94.6182	Lawrence/Jasper
2006	St. John's Ditch	3138	P	35.0	35	Mi.	Mercury (T)	Atmospheric Dep.	1G	2,4	37.0539	-89.5591	36.6108	-89.4467	Scott/New Madrid
2006	St. John's Ditch	3138	P	35.0	35	Mi.	Bacteria	Urban/Rural NPS	1G	2,4	37.0539	-89.5591	36.6108	-89.4467	Scott/New Madrid
2006	Stevenson Bayou	3135	C	14	14	Mi.	Low D.O.		1	2,4	36.9372	-89.2579	36.7621	-89.3465	Mississippi
1994	Stinson Cr.	0710	C	9.0	9	Mi.	Org. Sediment	Fulton WWTP	1G	2,4	38.8419	-91.9413	38.7736	-91.8504	Callaway
1994	Stinson Cr.	0710	C	9.0	9	Mi.	Low D.O.	Unknown	1	2,4	38.8419	-91.9413	38.7736	-91.8504	Callaway
2006	Stockton Branch	1361	C	1.0	5	Mi.	Low D.O.	Stockton WWTP,	1	2,4	37.7053	-93.7873	37.7171	-93.7867	Cedar
2006	Straight Fk.	0959	C	2.5	6	Mi.	Chloride	Versailles WWTP	1	2,4	38.4446	-92.8506	38.4758	-92.8494	Morgan
2006	Straight Fk..	0959	C	2.5	6	Mi.	Low D.O.	Versailles WWTP	1	2,4	38.4446	-92.8506	38.4758	-92.8494	Morgan
2008	Strother Cr.	2751	P	2.1	7	Mi.	Nickel (S)	Buick Mine	1G	2,4	37.5948	-91.0472	37.6051	-91.0167	Iron
2008	Strother Cr.	2751	P	2.1	7	Mi.	Lead (S)	Buick Mine	1G	2,4	37.5948	-91.0472	37.6051	-91.0167	Iron
2006	Strother Cr.	2751	P	2.1	7	Mi.	Zinc (S)	Buick Mine	1G	2,4	37.5948	-91.0472	37.6051	-91.0167	Iron
2008	Strother Cr.	2751U-01	U	1.0	n/a	Mi.	Arsenic (S)	Buick Mine	1G		37.5881	-91.0602	37.5948	-91.0472	Reynolds/Iron
2008	Strother Cr.	2751U-01	U	1.0	n/a	Mi.	Nickel (S)	Buick Mine	1G		37.5881	-91.0602	37.5948	-91.0472	Reynolds/Iron
2008	Strother Cr.	2751U-01	U	1.0	n/a	Mi.	Lead (S)	Buick Mine	1G		37.5881	-91.0602	37.5948	-91.0472	Reynolds/Iron
2006	Strother Cr.	2751U-01	U	1.0	n/a	Mi.	Zinc (S)	Buick Mine	1G		37.5881	-91.0602	37.5948	-91.0472	Reynolds/Iron
2006	Sugar Cr.	0686	P	5	5	Mi.	Low D.O.		1	2,4	39.4747	-92.4804	39.4613	-92.5558	Randolph
2008	Sugar Cr. Trib	0686U-01	U	0.2	n/a	Mi	Nickel (W)	Coal Mine (Aban.)	1G		39.4448	-92.5252	39.4469	-92.5230	Randolph
2002	Table Rock Lake	7313	L2	43100.0	43100	Ac.	Nutrients		G	1,2,4,5	36.3753	-93.9073	36.5955	-93.3109	Barry/Taney
2008	Thompson R.	0549	P	5.0	65	Mi.	Bacteria	Rural NPS	2	1,3,4,6	40.5769	-93.8011	40.5433	-93.8159	Harrison
2006	Troublesome Cr.	0074	C	34	34	Mi.	Low D.O.		1	2,4	40.1209	-92.0422	39.9046	-91.6701	Knox/Marion
2006	Turkey Cr.	3216	P	7.0	7	Mi.	Bacteria	Rural NPS	2	1,4	37.1062	-94.5065	37.1249	-94.6180	Jasper
2006	Turkey Cr.	3216	P	7.0	7	Mi.	Cadmium (W)	Mill tailings (Aban.)	1	2,4	37.1061	-94.5066	37.1249	-94.6178	Jasper
2006	Turkey Cr.	3216	P	7.0	7	Mi.	Cadmium (S)	Mill tailings (Aban.)	1G	2,4	37.1061	-94.5066	37.1249	-94.6178	Jasper
2008	Turkey Cr.	3216	P	7.0	7	Mi.	Lead (S)	Mill tailings (Aban.)	1G	2,4	37.1061	-94.5066	37.1249	-94.6178	Jasper
2008	Turkey Cr.	3216	P	7.0	7	Mi.	Zinc (S)	Mill tailings (Aban.)	1G	2,4	37.1061	-94.5066	37.1249	-94.6178	Jasper
2008	Turkey Cr.	3217	P	5.0	5	Mi.	Cadmium (S)	Mill tailings (Aban.)	1G	2,4	37.0755	-94.4270	37.1061	-94.5066	Jasper
2008	Turkey Cr.	3217	P	5.0	5	Mi.	Lead (S)	Mill tailings (Aban.)	1G	2,4	37.0755	-94.4270	37.1061	-94.5066	Jasper
2008	Turkey Cr.	3217	P	5.0	5	Mi.	Zinc (S)	Mill tailings (Aban.)	1G	2,4	37.0755	-94.4270	37.1061	-94.5066	Jasper

Year	Waterbody Name	WBID	Cls	I. Size	WB Size	Units	Pollutant	Source	IU	OU	Up Lat	Up Long	Down Lat	Down Long	U/D County
2008	Turkey Cr.	3217	P	5.0	5	Mi.	Bacteria	Rural NPS	2	1,4	37.0755	-94.4270	37.1061	-94.5066	Jasper
2006	Turkey Cr.	3282	P	2.4	2.4	Mi.	Cadmium (W)	Mill tailings (Aban.)	1	2,4	37.9233	-90.5482	37.9549	-90.5569	St. Francois
2006	Turkey Cr.	3282	P	2.4	2.4	Mi.	Lead (W)	Mill tailings (Aban.)	1	2,4	37.9233	-90.5482	37.9549	-90.5569	St. Francois
2006	Turkey Cr.	3282	P	1.2	2.4	Mi.	Zinc (W)	Mill tailings (Aban.)	1	2,4	37.9233	-90.5482	37.9383	-90.5526	St. Francois
2006	Village Cr.	2863	P	1.5	1.5	Mi.	Lead		1	2,4	37.5827	-90.2866	37.5657	-90.3093	Madison
2006	Village Cr.	2863	P	1.5	1.5	Mi.	Inorg. Sediment	Mill tailings (Aban.)	1G	2,4	37.5826	-90.2865	37.5657	-90.3094	Madison
1998	W. Fk. Black R.	2755	P	31.7	31.7	Mi.	Nutrients		G	1,2,4	37.5233	-91.2254	37.4465	-90.8520	Reynolds
2008	W. Fk. Black R.	2755	P	1.3	31.7	Mi.	Lead (S)	West Fk. Mine	1G	2,4	37.4900	-91.1069	37.4972	-91.0872	Reynolds
2008	W. Fk. Black R.	2755	P	1.3	31.7	Mi.	Nickel (S)	West Fk. Mine	1G	2,4	37.4900	-91.1069	37.4972	-91.0872	Reynolds
2006	W. Fk. Drywood Cr.	1317	C	5.5	5.5	Mi.	Low D.O.		1	2,4	37.6858	-94.6174	37.7144	-94.5494	Vernon
2002	W. Fk. Locust Cr.	0613	P	17.0	17	Mi.	Unknown		1G	2,4	40.1391	-93.2160	39.9649	-93.2149	Sullivan/Linn
2006	W. Fk. Medicine Cr.	0623	P	40.0	40	Mi.	Bacteria	Rural NPS	2	1,4	40.5804	-93.4257	40.1021	-93.3755	Mercer/Grundy
2006	W. Fk. Medicine Cr.	0623	P	40.0	40	Mi.	Unknown	Unknown	1G	2,4	40.5800	-93.4257	40.1024	-93.3755	Mercer/Grundy
2006	W. Fk. Niangua R.	1175	P	7	7	Mi.	Low D.O.		1	2,4	37.3659	-92.9150	37.4459	-92.9195	Webster
2006	W. Yellow Cr.	0599	C	43	43	Mi.	Low D.O.		1****	4****	40.0936	-92.9926	39.6518	-93.0541	Sullivan/Chariton
2006	Warm Fk. Spring R.	2579	P	1.2	12	Mi.	Bacteria	Unknown	2	1,4,5,6	36.5131	-91.5251	36.4990	-91.5275	Oregon
2006	Watkins Cr.	1708	C	3.5	3.5	Mi.	Chloride	Urban NPS	1	2,4	38.7680	-90.1907	38.7736	-90.1757	St. Louis
2006	Watkins Cr.	1708	C	3.5	3.5	Mi.	Bacteria	Urban NPS	2	1,4	38.7680	-90.1907	38.7736	-90.1757	St. Louis
2006	Weldon R.	0560	P	42	42	Mi.	Bacteria	Rural NPS	2	1,4	40.5794	-93.6108	40.1031	-93.6484	Mercer/Grundy
2008	Whetstone Cr.	1504	P	13.0	13	Mi.	Low D.O.	Rural NPS	1	2,4	37.1893	-92.3644	37.3120	-92.3909	Wright
2006	Willow Fk.	0955	C	6.5	6.5	Mi.	Low D.O.		1	2,4	38.6371	-92.8210	38.6113	-92.7359	Moniteau
2006	Willow Fk., Trib.	0956	C	0.5	0.5	Mi.	Low D.O.	Tipton WWTP	1	4	38.6308	-92.7681	38.6274	-92.7636	Moniteau
1998	Wilson Cr.	2375	P	18.0	18	Mi.	Unknown	Mult. Pt/Urban NPS	1G	2,4	37.2245	-93.3455	37.0685	-93.4008	Greene
2006	Wolf Cr.	2879	C	8	8	Mi.	Low D.O.		1	2,4	37.7954	-90.3839	37.7284	-90.4062	St. Francois
2006	Wolf Cr., Trib.	3589	C	1.5	1.5	Mi.	Low D.O.		1	2,4	37.7876	-90.4200	37.7775	-90.3985	St. Francois
2008	Wyaconda New Lake	7009	L1	9.0	9	Ac.	Atrazine	Rural NPS	3	1,2,4,5			40.3990	-91.9083	Clark

Bold text are additions/changes to the March 2009 Public Notice List.

* based on biological studies: crayfish

** Only 0.9 miles of this stream remains after the creation of the Leadwood tailings pond.

*** Metals are believed to be the pollutant based on analysis of invertebrate community

**** presumed uses. Due to an oversight, this waterbody is currently not listed in state WQ standards and no beneficial uses designated.

Key to List

Yr= Year this water body/pollutant was added to the 303(d) List

WBID= unique water body identification number

I Size: Size of impaired portion of waterbody

WB Size: Size of the entire waterbody

CL= water body classification in state water quality standards: P= permanently flowing waters, C= intermittent streams, L1= Drinking water lakes, L2= large multi-purpose lakes, L3= other recreational lakes

Pollutants = reason the water is impaired. Cd=Cadmium, Ni= Nickel, Pb= Lead, Zn = Zinc, SO4 = sulfate, Cl= chloride, FC = fecal coliform bacteria, NVSS = non-volatile (mineral) suspended solids, D.O. = dissolved oxygen, pH= degree of acidity or alkalinity of water, Hydromod.= Hydromodification, which is typically related to the operation of dams. (W) pollutant is in the water, (S) pollutant is in the sediment, (T) pollutant is in fish tissue. If none of these three options are shown, the pollutant is in the water.

Sources = the pollutant source causing the impairment. WWTP= wastewater treatment plant, PP= Power Plant, Unk.= Unknown, Aban. = Abandoned, Atmospheric Dep. = Atmospheric deposition (primarily rainfall), Mult.= Multiple, NPS= Non-point source, Pt.= Point Source, Rereg. Dam= Reregulation Dam - a low dam downstream of a larger hydroelectric dam.

IU = Impaired Beneficial Use(s). Those beneficial uses, assigned to this water in state water quality standards, that are not being met due to water pollution.

UU= Unimpaired Beneficial Use(s). Those beneficial uses assigned to this water in state water quality standard, that are not affected by the pollution.

Use codes for IU and UU columns are: G= General Criteria, 1G = General criteria pertaining to protection of aquatic life, 1= Protection of aquatic life, 2 = Whole Body Contact Recreation (swimming), 3= Public Drinking Water Supply, 4 = Livestock and Wildlife Watering, 5= Secondary Contact Recreation (Fishing and Boating), 6= Irrigation, 7= Industrial Water

Lat U = Latitude of upstream end of impaired water body (in decimal degrees)

Long U = Longitude of upstream end of impaired water body (in decimal degrees)

Lat D = Latitude of downstream end of impaired water body (in decimal degrees)

Long D = Longitude of downstream end of impaired water body (in decimal degrees)

County U/D = County the impaired segment is in. If the impaired segment is more than one county, the county of the upstream and downstream ends

Table 15. Other Waters Rated As Impaired and Believed to Be Impaired

The following list includes other classified waters in Missouri found to be impaired both by applying the Methodology for the Development of the 2008 Section 303(d) List in Missouri and the best professional judgement of the department. Included in this list are waters with approved TMDLs, waters where sufficient pollution control measures are in place, waters which are impaired by conditions rather than discrete pollutants, and other waters which were not approved for 303(d) listing by the Clean Water Commission.

Name	WBID	Length/Area (miles/acres)	County	Pollutant/Condition	Source
Big Otter Creek	1224	1.0	Henry	pH	Otter Creek AML
Brushy Creek	1592	3.0	Texas	Low Dissolved Oxygen	Houston WWTP
East Brush Creek	0811	2.5	Moniteau	Ammonia, Low Dissolved Oxygen	California N WWTP
Elkhorn Creek	0189	2.4	Montgomery	Low Dissolved Oxygen	Montgomery City NE WWTP
Gabriel Creek	0883	1.8	Morgan	Low Dissolved Oxygen	Stover WWTPs
Grand River	0430	7.3	Gentry	Habitat Alteration	Channelization
Howell Creek	2582	0.3	Howell	Chlorine	West Plains WWTP
Jacks Fork	2681	7.0	Shannon	Bacteria	Recreation
Little Sac River	1381	29.0	Greene	Bacteria	Rural, Urban NPS
Locust Creek	0606	13.5	Sullivan	Habitat Alteration	Channelization
McKenzie Creek	2787	1.0	Wayne	pH	Atmospheric Deposition
Middle Fork Tebo Creek	1284	5.5	Henry	Sulfate	Multiple AMLs
Middle Fork Tebo Creek, Trib.	1288	2.5	Henry	pH, Sulfate plus Chloride	Multiple AMLs
Monegaw Creek	1234	2.0	St. Clair	Sulfate plus Chloride	Acid Mine Drainage
North Fabius River	0056	13.2	Lewis	Habitat Alteration	Channelization
North Fork Salt River	0110	45.0	Shelby	Atrazine	Ag NPS
Piney Creek	2614	0.1	Oregon	Chlorine	Alton WWTP
Red Oak Creek, Trib.	3361	0.3	Gasconade	Low Dissolved Oxygen	Owensville WWTP
Saline Creek	2859	1.7	Madison	Nickel	Madison Mine
Second Nicolson Creek	1319	6.0	Barton	Chloride	Multiple AMLs
South Fabius River	0071	11.0	Marion	Habitat Alteration	Channelization
Trace Creek	2850	0.3	Madison	pH	Atmospheric Deposition

Table 16. Other Potentially Impaired Waters

The following waters are those for which there is some indication that an impairment to some designated use may exist, but the current data or information indicating the impairment do not meet the data requirements set out by Missouri's Section 303(d) Listing Methodology. The department will make an effort to conduct further monitoring on these waters in order to determine defensibly whether or not these impairments actually exist.

A large number of these potential impairments are ascribed to rural nonpoint sources. However, it should be noted that some of these problems, particularly low dissolved oxygen levels, may be due to natural conditions of the waters that are incompletely understood at this time. The department is currently studying baseline dissolved oxygen levels in small streams in regions of concern, which will help in the future to better distinguish natural stream conditions from anthropogenic impairments.

Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Ackerman Ditch	2809	Butler	Habitat Degradation	Rural NPS
Agee Creek	0334	Andrew	Habitat Degradation	Rural NPS
Anderson Branch	0874	Pettis	Habitat Degradation	Rural NPS
Apple Creek	1799	Perry	Unknown	Unknown
Arapahoe Creek	0282	Andrew	Habitat Degradation	Rural NPS
Ash Ditch	3141	New Madrid	Habitat Degradation	Rural NPS
Ash Ditch	3142	Mississippi	Habitat Degradation	Rural NPS
Ash Slough Ditch	3042	New Madrid	Habitat Degradation	Rural NPS
Asher Creek	1383	Greene	Low Dissolved Oxygen	Rural NPS
Auxvasse Creek	0706	Callaway	Low Dissolved Oxygen	Rural NPS
Back Creek	2880	St. Francois	Low Dissolved Oxygen	Rural NPS
Bagby Branch	0684	Randolph	Habitat Degradation	Rural NPS
Baker Branch	1294	St. Clair	Habitat Degradation	Rural NPS
Barber Creek	0622	Putnam	Habitat Degradation	Rural NPS
Barkers Creek	1209	Henry	Temperature, pH	Rural NPS, Acid Mine Drainage
Barkers Creek, Tributary	1211	Henry	pH	Acid Mine Drainage
Basin Fork	0867	Pettis	Habitat Degradation	Rural NPS
Basin Fork, Tributary	3522	Pettis	Habitat Degradation	Rural NPS
Bay De Charles, Tributary	0006	Marion	Habitat Degradation	Rural NPS
Bean Branch	0148	Audrain	Habitat Degradation	Rural NPS
Bear Creek	0008	Marion	Habitat Degradation	Urban, Rural NPS
Bear Creek	0009	Marion	Habitat Degradation	Rural NPS
Bear Creek	0057	Scotland	Habitat Degradation	Rural NPS
Bear Creek	0115	Macon	Habitat Degradation	Rural NPS
Bear Creek	0193	Montgomery	Habitat Degradation	Rural NPS
Bear Creek	0272	Platte	Habitat Degradation	Rural NPS
Bear Creek	0416	Saline	Habitat Degradation	Rural NPS

Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Bear Creek	0601	Linn	Habitat Degradation	Rural NPS
Bear Creek	0933	Johnson	Habitat Degradation	Rural NPS
Bear Creek	1220	Henry	Habitat Degradation	Rural NPS
Bear Creek	1253	Johnson	Habitat Degradation	Rural NPS
Beaver Branch	3265	McDonald	Zinc (sediment)	Unknown
Beaver Dam Creek	0145	Audrain	Habitat Degradation	Rural NPS
Beaver Dam Creek	2621	Ripley	Habitat Degradation	Rural NPS
Beaver Dam Creek	3548	Pettis	Habitat Degradation	Rural NPS
Beaver Dam Creek, Tributary	3550	Pettis	Habitat Degradation	Rural NPS
Beaver Dam Creek, Tributary	3549	Pettis	Habitat Degradation	Rural NPS
Bee Branch	0667	Chariton	Habitat Degradation	Rural NPS
Bee Branch	3545	Pettis	Habitat Degradation	Rural NPS
Bee Branch	3645	Vernon	Habitat Degradation	Rural NPS
Bee Branch	3501	Pettis	Habitat Degradation	Rural NPS
Bee Creek	0137	Monroe	Habitat Degradation	Rural NPS
Bee Creek	0273	Platte	Habitat Degradation	Rural NPS
Bee Creek, Tributary	0274	Platte	Habitat Degradation	Rural NPS
Bee Tree Lake	7309	St. Louis	Mercury	Atmospheric Deposition
Beecham Creek	3642	Vernon	Habitat Degradation	Rural NPS
Belew Creek	2179	Jefferson	Low Dissolved Oxygen	Rural NPS
Ben Branch Lake	7186	Osage	Mercury	Atmospheric Deposition
Bethany Reservoir	7109	Harrison	Mercury	Atmospheric Deposition
Big Creek	0207	Lincoln	Habitat Degradation	Rural NPS
Big Creek	0634	Carroll	Habitat Degradation	Rural NPS
Big Creek	0638	Carroll	Habitat Degradation	Rural NPS
Big Creek	1257	Cass	Habitat Degradation	Rural NPS
Big Creek	2673	Shannon	Low Dissolved Oxygen	Rural NPS
Big Creek	2916	Iron	Lead	Glover Smelter
Big Deer Creek	1276	Bates	Habitat Degradation	Rural NPS
Big Lead Creek	0180	Lincoln	Habitat Degradation	Rural NPS
Big Muddy Creek	0441	Daviess	Habitat Degradation	Rural NPS
Big Muddy Creek	0461	Gentry	Habitat Degradation	Rural NPS
Big Muddy Creek	0462	Harrison	Habitat Degradation	Rural NPS
Big No Creek	0553	Grundy	Habitat Degradation	Rural NPS
Big River	2074	Jefferson	Lead, Cadmium	Multiple Abandoned Lead Mines
Big Rock Creek	0464	Worth	Habitat Degradation	Rural NPS
Big Rock Creek	0465	Worth	Habitat Degradation	Rural NPS
Billy Creek	0659	Adair	Habitat Degradation	Rural NPS
Billy's Branch	0124	Macon	Habitat Degradation	Rural NPS
Bitterroot Creek	1312	Vernon	Habitat Degradation	Rural NPS

Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Black Creek	0111	Shelby	Habitat Degradation	Rural NPS
Black Creek	0112	Shelby	Habitat Degradation	Rural NPS
Black Creek	3309	Cass	Habitat Degradation	Rural NPS
Black Jack Creek	0917	Johnson	Habitat Degradation	Rural NPS
Black River	2769	Butler	Mercury	Atmospheric Deposition
Black River Ditch	2807	Butler	Habitat Degradation	Rural NPS
Black River, Ditch to	2776	Butler	Habitat Degradation	Rural NPS
Black River, Ditch to	2777	Butler	Habitat Degradation	Rural NPS
Black River, Ditch to	2770	Butler	Habitat Degradation	Rural NPS
Blackwater River	0891	Saline	Sediment	Limestone Quarry
Blackwater River, Tributary	3537	Saline	Habitat Degradation	Rural NPS
Blackwater River, Tributary	3541	Pettis	Habitat Degradation	Rural NPS
Blackwater River, Tributary	3543	Pettis	Habitat Degradation	Rural NPS
Blackwater River, Tributary	3544	Pettis	Habitat Degradation	Rural NPS
Blue Ditch	3146	Scott	Habitat Degradation	Rural NPS
Blue Ditch	3147	Scott	Habitat Degradation	Rural NPS
Blue Spring Slough	2775	Butler	Habitat Degradation	Rural NPS
Blue Springs Creek	1852	Crawford	Iron	Abandoned Iron Pyrite Mine
Bluestem Lake	7370	Jackson	Mercury	Atmospheric Deposition
Bois Brule Ditch	1782	Perry	Habitat Degradation	Rural NPS
Bois Brule Ditch, Tributary	1783	Perry	Habitat Degradation	Rural NPS
Bois Brule Ditch, Tributary	1784	Perry	Habitat Degradation	Rural NPS
Bois Brule Ditch, Tributary	1785	Perry	Habitat Degradation	Rural NPS
Bones Branch	1301	Bates	Habitat Degradation	Rural NPS
Bonhomme Creek	1701	St. Louis	Chloride	Urban Runoff
Bourbeuse River	2034	Franklin	Mercury	Atmospheric Deposition
Bradley Creek	0931	Johnson	Habitat Degradation	Rural NPS
Brawley Creek	3424	Johnson	Habitat Degradation	Rural NPS
Brewer Lake Ditch	3153	Mississippi	Habitat Degradation	Rural NPS
Bridge Creek	0066	Scotland	Habitat Degradation	Rural NPS
Bridge Creek	0070	Knox	Habitat Degradation	Rural NPS
Bridge Creek	0635	Carroll	Habitat Degradation	Rural NPS
Brush Creek	0069	Schuyler	Habitat Degradation	Rural NPS
Brush Creek	0106	Monroe	Habitat Degradation	Rural NPS
Brush Creek	0107	Monroe	Habitat Degradation	Rural NPS
Brush Creek	0276	Platte	Habitat Degradation	Rural NPS
Brush Creek	0408	Lafayette	Habitat Degradation	Rural NPS
Brush Creek	0563	Mercer	Habitat Degradation	Rural NPS
Brush Creek	0574	Harrison	Habitat Degradation	Rural NPS

Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Brush Creek	0672	Macon	Habitat Degradation	Rural NPS
Brush Creek	1207	Benton	Habitat Degradation	Rural NPS
Brush Creek	1238	St. Clair	Habitat Degradation	Rural NPS
Brush Creek	3298	Benton	Habitat Degradation	Rural NPS
Brush Creek	3794	Polk	Habitat Degradation	Rural NPS
Brush Creek, Tributary	1208	Benton	Habitat Degradation	Rural NPS
Brushy Creek	0336	Nodaway	Habitat Degradation	Rural NPS
Brushy Creek	0377	Ray	Habitat Degradation	Rural NPS
Brushy Creek	0395	Clay	Habitat Degradation	Rural NPS
Brushy Creek	0438	Daviess	Habitat Degradation	Rural NPS
Brushy Creek	0531	Caldwell	Habitat Degradation	Rural NPS
Brushy Creek	1593	Texas	Low Dissolved Oxygen	Unknown
Brushy Creek	3500	Pettis	Habitat Degradation	Rural NPS
Brushy Creek	3785	Pettis	Habitat Degradation	Rural NPS
Bryants Creek	0022	Lincoln	Habitat Degradation	Rural NPS
Buck Branch	3187	Jasper	Habitat Degradation	Rural NPS
Buffalo Creek	3539	Pettis	Habitat Degradation	Rural NPS
Buffalo Ditch	3119	Dunklin	Habitat Degradation	Urban, Rural NPS
Buncomb Branch	3542	Pettis	Habitat Degradation	Rural NPS
Burr Oak Creek	0363	Carroll	Habitat Degradation	Rural NPS
Busch CA Lake #35	7057	St. Charles	Mercury	Atmospheric Deposition
Bynum Creek	0709	Callaway	Sediment	Limestone Quarry
Cache River Ditch	3009	Butler	Habitat Degradation	Rural NPS
Camp Branch	0866	Pettis	Habitat Degradation	Rural NPS
Camp Branch	1258	Cass	Habitat Degradation	Rural NPS
Camp Branch	1296	Bates	Habitat Degradation	Rural NPS
Camp Branch	3324	Clay	Habitat Degradation	Rural NPS
Camp Branch, Tributary	3518	Pettis	Habitat Degradation	Rural NPS
Camp Branch, Tributary	3519	Pettis	Habitat Degradation	Rural NPS
Camp Branch, Tributary	3520	Pettis	Habitat Degradation	Rural NPS
Camp Creek	0894	Saline	Habitat Degradation	Rural NPS
Campbell Creek	0491	Gentry	Habitat Degradation	Rural NPS
Campbell Creek	0629	Livingston	Habitat Degradation	Rural NPS
Cane Creek	2833	Butler	Habitat Degradation	Rural NPS
Cane Creek Ditch	2820	Butler	Habitat Degradation	Rural NPS
Caney Creek	3051	Scott	Habitat Degradation	Rural NPS
Castile Creek	0322	Clinton	Habitat Degradation	Rural NPS
Castile Creek, Tributary	0323	Clinton	Habitat Degradation	Rural NPS

Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Castor River Diversion Channel	2273	Bollinger	Habitat Degradation	Rural NPS
Cato Slough	3081	Stoddard	Habitat Degradation	Rural NPS
Cato Slough	3082	Bollinger	Habitat Degradation	Rural NPS
Cave Spring Branch	3162	Jasper	E. coli	Rural NPS
Cave Spring Creek	1272	Cass	Habitat Degradation	Rural NPS
Cedar Creek	0861	Pettis	Habitat Degradation	Rural NPS
Center Creek	3214	Lawrence	Unknown	Unknown
Chapman Branch	0476	Gentry	Habitat Degradation	Rural NPS
Chariton River, Old Channel	0649	Putnam	Habitat Degradation	Rural NPS
Chariton River, Old Channel	0665	Chariton	Habitat Degradation	Rural NPS
Chariton River, Old Channel	0694	Chariton	Habitat Degradation	Rural NPS
Chariton River, Old Channel	0695	Chariton	Habitat Degradation	Rural NPS
Chariton River, Tributary	0648	Putnam	Habitat Degradation	Rural NPS
Cheese Creek	3301	Pettis	Habitat Degradation	Rural NPS
Chesapeake Creek	1421	Lawrence	Sediment	Quarry
Cinque Hommes Creek	1781	Perry	Habitat Degradation	Rural NPS
Clammer Branch	1235	St. Clair	Habitat Degradation	Rural NPS
Clark Branch	0676	Chariton	Habitat Degradation	Rural NPS
Clear Creek	0007	Marion	Habitat Degradation	Rural NPS
Clear Creek	0117	Monroe	Habitat Degradation	Rural NPS
Clear Creek	0292	Nodaway	Habitat Degradation	Rural NPS
Clear Creek	0388	Clay	Altered Aquatic Community	Rural NPS
Clear Creek	0390	Clinton	Altered Aquatic Community	Rural NPS
Clear Creek	0433	Daviess	Habitat Degradation	Rural NPS
Clear Creek	0889	Cooper	Habitat Degradation	Rural NPS
Clear Creek	1206	Benton	Habitat Degradation	Rural NPS
Clear Creek	1259	Cass	Habitat Degradation	Rural NPS
Clear Creek, Tributary	3297	Benton	Habitat Degradation	Rural NPS
Clear Creek, Tributary	0393	Clinton	Habitat Degradation	Rural NPS
Clear Creek, Tributary	3633	Vernon	Habitat Degradation	Rural NPS
Clear Creek, Tributary	3797	Vernon	Habitat Degradation	Rural NPS
Clear Fork	0935	Johnson	Low Dissolved Oxygen	Wastewater discharges, Rural NPS
Clear Fork	0936	Johnson	Habitat Degradation	Rural NPS
Clear Fork, Tributary	3431	Johnson	Habitat Degradation	Rural NPS
Clear Fork, Tributary	3432	Johnson	Habitat Degradation	Rural NPS
Clear Fork, Tributary	3433	Johnson	Habitat Degradation	Rural NPS

Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Coal Creek	0572	Harrison	Habitat Degradation	Rural NPS
Coal Creek	1214	Henry	Habitat Degradation	Rural NPS, wastewater discharge
Coldwater Creek	1271	Cass	Habitat Degradation	Rural NPS
Cole Creek	0225	St. Charles	Habitat Degradation	Rural NPS
Comstock Creek	1322	Vernon	Habitat Degradation	Rural NPS
Comstock Creek	1323	Barton	Habitat Degradation	Rural NPS
Contrary Creek	0269	Buchanan	Habitat Degradation	Rural NPS
Contrary Creek	1458	Osage	Habitat Degradation	Rural NPS
Contrary Creek	1459	Osage	Habitat Degradation	Rural NPS
Cooley Lake	7090	Clay	Mercury	Atmospheric Deposition
Coon Creek	0132	Randolph	Low Dissolved Oxygen	Rural NPS, wastewater discharge
Coon Creek	0187	Montgomery	Habitat Degradation	Rural NPS
Coon Creek	0208	Lincoln	Habitat Degradation	Rural NPS
Coon Creek	3191	Jasper	Habitat Degradation	Rural NPS
Coon Creek	3194	Dade	Habitat Degradation	Rural NPS
Coon Creek	3496	Pettis	Habitat Degradation	Rural NPS
Coon Creek, Tributary	0133	Randolph	Low Dissolved Oxygen	Wastewater discharge
Coon Creek, Tributary	3497	Lamine	Habitat Degradation	Rural NPS
Coon Creek, Tributary	3498	Lamine	Habitat Degradation	Rural NPS
Coopers Creek	1222	Henry	Habitat Degradation	Rural NPS
Coopers Creek, Tributary	1223	St. Clair	Habitat Degradation	Rural NPS
Cottontail Lake	7379	Jackson	Temperature	Unknown
Cotton Wood Creek	0671	Chariton	Habitat Degradation	Rural NPS
Cottonwood Creek	0410	Lafayette	Habitat Degradation	Rural NPS
Cottonwood Creek	0527	Caldwell	Habitat Degradation	Rural NPS
Cottonwood Creek	0548	Livingston	Habitat Degradation	Rural NPS
Cottonwood Creek	3651	Vernon	Habitat Degradation	Rural NPS
Cow Branch	0247	Atchison	Habitat Degradation	Rural NPS
Cow Creek	0895	Saline	Habitat Degradation	Rural NPS
Crabapple Creek	0365	Ray	Habitat Degradation	Rural NPS
Crabapple Creek	0536	Caldwell	Habitat Degradation	Rural NPS
Craven Ditch	2816	Butler	Habitat Degradation	Rural NPS
Crawford Creek	1254	Cass	Habitat Degradation	Rural NPS
Crooked Creek	0116	Macon	Habitat Degradation	Rural NPS
Crooked Creek	0188	Montgomery	Habitat Degradation	Rural NPS
Crooked Creek	0330	Dekalb	Habitat Degradation	Rural NPS
Crooked Creek	0333	Andrew	Habitat Degradation	Rural NPS

Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Crooked Creek	0551	Livingston	Habitat Degradation	Rural NPS
Crooked Creek	3307	Cass	Habitat Degradation	Rural NPS
Crooked Creek	3434	Pettis	Habitat Degradation	Rural NPS
Crooked River	0371	Ray	Habitat Degradation	Rural NPS
Crooked River	0376	Caldwell	Habitat Degradation	Rural NPS
Cuivre River	0151	Lincoln	Low Dissolved Oxygen	Rural NPS
Cypress Creek	0443	Daviess	Habitat Degradation	Rural NPS
Cypress Ditch #1	2616	Ripley	Habitat Degradation	Rural NPS
Cypress Ditch Lateral	2981	Stoddard	Habitat Degradation	Rural NPS
Cypress Ditch Lateral	2982	Stoddard	Habitat Degradation	Rural NPS
Dan River	2808	Butler	Habitat Degradation	Rural NPS
Davis Creek	0144	Audrain	Habitat Degradation	Urban, Rural NPS
Davis Creek	0255	Holt	Habitat Degradation	Rural NPS
Davis Creek	0907	Lafayette	Habitat Degradation	Rural NPS
Davis Creek	912	Lafayette	Unknown	Unknown
Davis Creek Ditch	0253	Holt	Habitat Degradation	Rural NPS
Davis Creek, Tributary	0254	Holt	Habitat Degradation	Rural NPS
Dead Oak Creek	0539	Caldwell	Habitat Degradation	Rural NPS
Deepwater Creek	1215	Henry	Dissolved Oxygen	Upstream Impoundment
Deepwater Creek	1217	Henry	Habitat Degradation	Rural NPS
Deer Creek	1213	Henry	Habitat Degradation	Rural NPS
Des Moines River	0036	Clark	Habitat Degradation	Rural NPS
Dicks Creek	0320	Platte	Habitat Degradation	Rural NPS
Dicks Fork	3197	Barton	Habitat Degradation	Rural NPS
Dillon Creek	0268	Andrew	Sediment	Limestone Quarry
Ditch #1	2974	Dunklin	Habitat Degradation	Rural NPS
Ditch #1	2987	Stoddard	Habitat Degradation	Rural NPS
Ditch #1	2988	Bollinger	Habitat Degradation	Rural NPS
Ditch #1	3028	Dunklin	Habitat Degradation	Rural NPS
Ditch #1	3045	Scott	Habitat Degradation	Rural NPS
Ditch #1	3048	Scott	Habitat Degradation	Rural NPS
Ditch #1	3050	Stoddard	Mercury	Atmospheric Deposition
Ditch #1	3052	Scott	Habitat Degradation	Rural NPS
Ditch #1	3116	Dunklin	Habitat Degradation	Rural NPS
Ditch #1	3117	Dunklin	Habitat Degradation	Rural NPS
Ditch #1, Ditch to	2975	Dunklin	Habitat Degradation	Rural NPS
Ditch #1, Ditch to	3054	Cape Girardeau	Habitat Degradation	Rural NPS
Ditch #1, Ditch to	3055	Cape Girardeau	Habitat Degradation	Rural NPS

Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Ditch #1, Ditch to	3056	Cape Girardeau	Habitat Degradation	Rural NPS
Ditch #2	2617	Ripley	Habitat Degradation	Rural NPS
Ditch #2	2618	Ripley	Habitat Degradation	Rural NPS
Ditch #2	2991	Stoddard	Habitat Degradation	Rural NPS
Ditch #2	3018	Pemiscot	Habitat Degradation	Rural NPS
Ditch #2	3104	New Madrid	Habitat Degradation	Rural NPS
Ditch #2, Ditch to	2619	Ripley	Habitat Degradation	Rural NPS
Ditch #3	2972	Dunklin	Habitat Degradation	Rural NPS
Ditch #3	2973	Dunklin	Habitat Degradation	Rural NPS
Ditch #3	2994	Stoddard	Habitat Degradation	Rural NPS
Ditch #3	3019	Pemiscot	Habitat Degradation	Rural NPS
Ditch #3	3100	New Madrid	Habitat Degradation	Rural NPS
Ditch #3, Ditch to	3021	Pemiscot	Habitat Degradation	Rural NPS
Ditch #4	2995	Stoddard	Habitat Degradation	Rural NPS
Ditch #4	3020	Pemiscot	Habitat Degradation	Rural NPS
Ditch #4	3046	Scott	Habitat Degradation	Rural NPS
Ditch #4	3047	Scott	Habitat Degradation	Rural NPS
Ditch #4	3099	New Madrid	Habitat Degradation	Rural NPS
Ditch #5	2996	Stoddard	Habitat Degradation	Rural NPS
Ditch #5	3015	Pemiscot	Habitat Degradation	Rural NPS
Ditch #5, Ditch to	3014	Pemiscot	Habitat Degradation	Rural NPS
Ditch #6	2997	Stoddard	Habitat Degradation	Rural NPS
Ditch #6	3022	Pemiscot	Habitat Degradation	Rural NPS
Ditch #6	3024	Pemiscot	Habitat Degradation	Rural NPS
Ditch #6	3096	New Madrid	Habitat Degradation	Rural NPS
Ditch #6	3097	Stoddard	Habitat Degradation	Rural NPS
Ditch #6, Ditch to	3023	Pemiscot	Habitat Degradation	Rural NPS
Ditch #7	3013	Pemiscot	Habitat Degradation	Rural NPS
Ditch #7	3095	New Madrid	Habitat Degradation	Rural NPS
Ditch #8	3094	New Madrid	Habitat Degradation	Rural NPS
Ditch #9	3092	New Madrid	Habitat Degradation	Rural NPS
Ditch #9	3093	New Madrid	Habitat Degradation	Rural NPS
Ditch #10	2998	Stoddard	Habitat Degradation	Rural NPS
Ditch #10	2999	Wayne	Habitat Degradation	Rural NPS
Ditch #10	3139	New Madrid	Habitat Degradation	Rural NPS
Ditch #11	2986	Stoddard	Habitat Degradation	Rural NPS
Ditch #17	3078	Stoddard	Habitat Degradation	Rural NPS

Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Ditch #22	2772	Butler	Habitat Degradation	Rural NPS
Ditch #23	2773	Butler	Habitat Degradation	Rural NPS
Ditch #24	3062	Stoddard	Habitat Degradation	Rural NPS
Ditch #24	3074	Stoddard	Habitat Degradation	Rural NPS
Ditch #25	3068	Stoddard	Habitat Degradation	Rural NPS
Ditch #25	3072	Stoddard	Habitat Degradation	Rural NPS
Ditch #26	3070	Stoddard	Habitat Degradation	Rural NPS
Ditch #26	3071	Cape Girardeau	Habitat Degradation	Rural NPS
Ditch #27	3069	Cape Girardeau	Habitat Degradation	Rural NPS
Ditch #30	3075	Stoddard	Habitat Degradation	Rural NPS
Ditch #33	3065	Stoddard	Habitat Degradation	Rural NPS
Ditch #33	3066	Stoddard	Habitat Degradation	Rural NPS
Ditch #34	3061	Stoddard	Habitat Degradation	Rural NPS
Ditch #34	3064	Cape Girardeau	Habitat Degradation	Rural NPS
Ditch #35	3063	Stoddard	Habitat Degradation	Rural NPS
Ditch #36	3109	Dunklin	Low Dissolved Oxygen	Rural NPS
Ditch #36	3110	Dunklin	Habitat Degradation	Rural NPS
Ditch #41	3090	New Madrid	Habitat Degradation	Rural NPS
Ditch #42	3091	Stoddard	Habitat Degradation	Rural NPS
Ditch #66	3036	Pemiscot	Habitat Degradation	Rural NPS
Ditch #66	3049	Pemiscot	Habitat Degradation	Rural NPS
Ditch #79	3035	Dunklin	Habitat Degradation	Rural NPS
Ditch #80	3029	Dunklin	Habitat Degradation	Rural NPS
Ditch #81	3102	Dunklin	Habitat Degradation	Rural NPS
Ditch #84	3103	Pemiscot	Habitat Degradation	Rural NPS
Ditch #101	3083	Bollinger	Habitat Degradation	Rural NPS
Ditch #101, Ditch to	3084	Bollinger	Habitat Degradation	Rural NPS
Ditch #104	3043	New Madrid	Habitat Degradation	Rural NPS
Ditch #110	3073	Cape Girardeau	Habitat Degradation	Rural NPS
Ditch #251	3038	Dunklin	Habitat Degradation, Low Dissolved Oxygen, Mercury	Rural NPS, Unknown, Atmospheric Deposition
Ditch #258	3039	Pemiscot	Habitat Degradation	Rural NPS
Ditch #258	3040	New Madrid	Habitat Degradation	Rural NPS
Ditch #259	3011	Dunklin	Habitat Degradation	Rural NPS
Ditch #287	3067	Stoddard	Habitat Degradation	Rural NPS
Ditch #290	3088	New Madrid	Habitat Degradation	Rural NPS
Ditch #290	3089	New Madrid	Habitat Degradation	Rural NPS

Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Ditch #293	3098	Pemiscot	Habitat Degradation	Rural NPS
Ditler Branch	3296	Benton	Habitat Degradation	Rural NPS
Dog Creek	0510	Daviess	Sediment	Limestone Quarry
Double Branch	1298	Bates	Habitat Degradation	Rural NPS
Douglas Branch	3648	Vernon	Habitat Degradation	Rural NPS
Doxies Creek	0679	Howard	Habitat Degradation	Rural NPS
Dry Auglaize Creek	1144	Camden	Bacteria	Wastewater Discharge
Dry Branch	1406	Greene	Ammonia, Low Dissolved Oxygen	Rural NPS
Dry Branch	3189	Jasper	Habitat Degradation	Rural NPS
Dry Creek	0940	Saline	Habitat Degradation	Rural NPS
Drywood Creek	1314	Vernon	Habitat Degradation	Rural NPS
Duck Creek	0689	Macon	Habitat Degradation	Rural NPS
Duck Creek	1210	Benton	Habitat Degradation	Rural NPS
Dudley Main Ditch	2977	Stoddard	Habitat Degradation	Rural NPS
Dudley Main Ditch	2978	Stoddard	Habitat Degradation	Rural NPS
Duncan Creek	1311	Vernon	Habitat Degradation	Rural NPS
Dutchtown Ditch	2193	Cape Girardeau	Habitat Degradation	Rural NPS
Duval Creek	3199	Jasper	Habitat Degradation	Rural NPS
Dyer Rock Creek	3438	Lafayette	Habitat Degradation	Rural NPS
East Bear Creek	0934	Johnson	Habitat Degradation	Rural NPS
East Branch	1264	Cass	Habitat Degradation	Rural NPS
East Branch Crawford Creek	1255	Cass	Habitat Degradation	Rural NPS
East Branch Elkhorn Creek	0288	Nodaway	Habitat Degradation	Rural NPS
East Branch Squaw Creek	0257	Holt	Habitat Degradation	Rural NPS
East Cow Creek	0896	Saline	Habitat Degradation	Rural NPS
East Creek	1265	Cass	Habitat Degradation	Rural NPS
East Creek, Tributary	1266	Cass	Habitat Degradation	Rural NPS
East Ditch #1	3107	New Madrid	Habitat Degradation	Rural NPS
East Ditch #1	3108	New Madrid	Habitat Degradation	Rural NPS
East Fork Bee Branch	3644	Vernon	Habitat Degradation	Rural NPS
East Fork Big Creek	0446	Harrison	Habitat Degradation	Rural NPS
East Fork Big Creek	0447	Harrison	Habitat Degradation	Rural NPS
East Fork Big Muddy Creek	0463	Harrison	Habitat Degradation	Rural NPS
East Fork Chariton River	0682	Randolph	Habitat Degradation	Rural NPS
East Fork Chariton River	0697	Macon	Habitat Degradation	Rural NPS
East Fork Crooked River	0373	Ray	Habitat Degradation	Rural NPS
East Fork Crooked River, Tributary	0374	Ray	Habitat Degradation	Rural NPS

Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
East Fork Drywood Creek	1320	Barton	Low Dissolved Oxygen	Rural NPS
East Fork Fishing River	0386	Clay	Altered Aquatic Community	Urban, Rural NPS
East Fork Grand River	0467	Worth	Habitat Degradation	Rural NPS
East Fork Honey Creek	0555	Mercer	Habitat Degradation	Rural NPS
East Fork Little Tarkio Creek	0249	Atchison	Habitat Degradation	Rural NPS
East Fork Locust Creek	3706	Sullivan	Low Dissolved Oxygen	Milan WWTP
East Fork Lost Creek	0497	Dekalb	Habitat Degradation	Rural NPS
East Fork Postoak Creek	0932	Johnson	Habitat Degradation	Rural NPS
East Fork Postoak Creek, Tributary	3429	Johnson	Habitat Degradation	Rural NPS
East Fork Postoak Creek, Tributary	3428	Johnson	Habitat Degradation	Rural NPS
East Fork Salt Pond Creek	0909	Saline	Habitat Degradation	Rural NPS
East Fork Shoal Creek	0398	Clay	Habitat Degradation	Rural NPS
East Fork Sni-A-Bar Creek	0402	Lafayette	Habitat Degradation	Rural NPS
East Fork Sni-A-Bar Creek	3440	Lafayette	Habitat Degradation	Rural NPS
East Fork Sni-A-Bar Creek, Tributary	3441	Lafayette	Habitat Degradation	Rural NPS
East Fork Sni-A-Bar Creek, Tributary	3442	Lafayette	Habitat Degradation	Rural NPS
East Fork Walnut Creek	0688	Randolph	Habitat Degradation	Rural NPS
East Yellow Creek	0597	Linn	Habitat Degradation	Rural NPS
Edmondson Creek	0414	Saline	Habitat Degradation	Rural NPS
Edmondson Creek, Tributary	0415	Saline	Habitat Degradation	Rural NPS
Eight Mile Creek	1262	Cass	Habitat Degradation	Rural NPS
Elk Branch	3493	Pettis	Habitat Degradation	Rural NPS
Elk Branch, Tributary	3798	Pettis	Habitat Degradation	Rural NPS
Elk Chute Ditch	3030	Dunklin	Habitat Degradation	Rural NPS
Elk Creek	0603	Chariton	Habitat Degradation	Rural NPS
Elk Creek	0604	Chariton	Habitat Degradation	Rural NPS
Elk Creek	3546	Pettis	Habitat Degradation	Rural NPS
Elk Fork	0858	Pettis	Habitat Degradation	Rural NPS
Elk Fork, Tributary	3503	Pettis	Habitat Degradation	Rural NPS
Elk Fork	1278	Bates	Habitat Degradation	Rural NPS
Elk Fork Salt River	0130	Monroe	Habitat Degradation	Rural NPS
Elk Fork Salt River	0131	Monroe	Habitat Degradation	Rural NPS
Elkhorn Creek	0287	Nodaway	Habitat Degradation	Rural NPS
Elm Branch	1283	Henry	Habitat Degradation	Rural NPS

Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Elm Creek	0620	Putnam	Habitat Degradation	Rural NPS
Elm Creek	0645	Schuyler	Habitat Degradation	Rural NPS
Elm Grove Branch	0331	Gentry	Habitat Degradation	Rural NPS
Fassnight Creek	3370	Greene	Habitat Degradation	Rural NPS
Fassnight Creek	3427	Greene	Habitat Degradation	Rural NPS
Fellows Lake	7237	Greene	Mercury	Atmospheric Deposition
Femme Osage Creek	1605	St. Charles	Mercury	Atmospheric Deposition
Finney Creek	0902	Saline	Habitat Degradation	Rural NPS
Finney Creek	0903	Saline	Habitat Degradation	Rural NPS
Fire Branch	0375	Ray	Habitat Degradation	Rural NPS
Fire Prairie Creek	3412	Jackson	Habitat Degradation	Rural NPS
First Creek	0318	Clay	Habitat Degradation	Rural NPS
Fish Branch	0143	Audrain	Habitat Degradation	Rural NPS
Fish Lake Ditch	3131	Mississippi	Habitat Degradation	Rural NPS
Fish Trap Slough	3006	Butler	Habitat Degradation	Rural NPS
Fishing River	0383	Clay	Altered Aquatic Community	Rural NPS
Flagstaff Creek	0915	Johnson	Habitat Degradation	Rural NPS
Flat Creek	0129	Monroe	Habitat Degradation	Rural NPS
Flat Creek	0864	Pettis	Mercury	Atmospheric Deposition
Flat Creek	0865	Pettis	Mercury	Atmospheric Deposition
Flat Creek	0892	Saline	Habitat Degradation	Rural NPS
Flat Creek, Tributary	3508	Pettis	Habitat Degradation	Rural NPS
Flat Creek, Tributary	3509	Pettis	Habitat Degradation	Rural NPS
Flat Creek, Tributary	3511	Pettis	Habitat Degradation	Rural NPS
Flat Creek, Tributary	3516	Pettis	Habitat Degradation	Rural NPS
Flat Creek, Tributary	3517	Pettis	Habitat Degradation	Rural NPS
Flat Creek, Tributary	3523	Pettis	Habitat Degradation	Rural NPS
Flat Creek, Tributary	3524	Pettis	Habitat Degradation	Rural NPS
Flat Creek, Tributary	3528	Pettis	Habitat Degradation	Rural NPS
Flat Creek, Tributary	3529	Pettis	Habitat Degradation	Rural NPS
Flat Creek, Tributary	3530	Pettis	Habitat Degradation	Rural NPS
Fletcher Creek	0471	Worth	Habitat Degradation	Rural NPS
Florida Creek	0289	Nodaway	Habitat Degradation	Rural NPS
Floyd Creek	0114	Adair	Habitat Degradation	Rural NPS
Fly Creek	3636	Vernon	Habitat Degradation	Rural NPS
Fountain Farm Branch	3657	Washington	Habitat Degradation	Rural NPS

Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Fox Creek	0583	Harrison	Habitat Degradation	Rural NPS
Fox River	0037	Clark	Atrazine	Rural NPS
Fox River	0038	Clark	Habitat Degradation	Rural NPS
Foxboro Lake	7382	Franklin	Mercury	Atmospheric Deposition
Fredericktown City Lake	7328	Madison	Lead	Mine Tailings
Galbreath Creek	0135	Randolph	Habitat Degradation	Rural NPS
Gallinipper Creek	1226	St. Clair	Habitat Degradation	Rural NPS
Gallinipper Creek	1227	St. Clair	Habitat Degradation	Rural NPS
Gans Creek	1004	Boone	Low Dissolved Oxygen	Rural NPS
Garrison Fork	0407	Lafayette	Habitat Degradation	Rural NPS
Gees Creek	0590	Grundy	Habitat Degradation	Rural NPS
Gillum Creek	1307	Bates	Habitat Degradation	Rural NPS
Glendale Fork	3202	Barton	Habitat Degradation	Rural NPS
Goose Creek	0456	Daviess	Habitat Degradation	Rural NPS
Goose Creek	0532	Caldwell	Habitat Degradation	Rural NPS
Goose Pond Ditch	3086	Stoddard	Habitat Degradation	Rural NPS
Goose Pond Ditch, Tributary	3087	Stoddard	Habitat Degradation	Rural NPS
Gopher Lake	7383	Jackson	Temperature	Rural NPS
Grand River, Old Channel	0512	Daviess	Habitat Degradation	Rural NPS
Grand River, Old Channel	0513	Daviess	Habitat Degradation	Rural NPS
Grand River, Old Channel	0517	Livingston	Habitat Degradation	Rural NPS
Grand River, Old Channel	0625	Livingston	Habitat Degradation	Rural NPS
Grand River, Old Channel	0628	Livingston	Habitat Degradation	Rural NPS
Grand River, Old Channel	0630	Livingston	Habitat Degradation	Rural NPS
Granddaddy's Creek	1216	Henry	Habitat Degradation	Rural NPS
Grantham Creek	0478	Gentry	Habitat Degradation	Rural NPS
Grassy Creek	0072	Lewis	Habitat Degradation	Rural NPS
Grassy Creek	3538	Saline	Habitat Degradation	Rural NPS
Greer Branch	0850	Pettis	Habitat Degradation	Rural NPS
Greer Creek	1176	Webster	Low Dissolved Oxygen	Rural NPS
Greys Lake	0233	Atchison	Habitat Degradation	Rural NPS
Grindstone Creek	0493	Daviess	Habitat Degradation	Rural NPS
Grindstone Creek	0502	Dekalb	Habitat Degradation	Rural NPS
Grindstone Creek, Tributary	0504	Dekalb	Habitat Degradation	Rural NPS
Grove Creek	0321	Platte	Habitat Degradation	Rural NPS
Grove Creek	3204	Jasper	Lead, Zinc	Mine Tailings
Guinns Creek	0023	Pike	Habitat Degradation	Rural NPS

Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Hackberry Branch	3650	Vernon	Habitat Degradation	Rural NPS
Half Moon Bayou	3017	Pemiscot	Habitat Degradation	Rural NPS
Harding Creek	1273	Cass	Habitat Degradation	Rural NPS
Harless Creek	1270	Cass	Habitat Degradation	Rural NPS
Harviell Ditch (#3)	2615	Butler	Habitat Degradation	Rural NPS
Hayden Creek	2165	St. Francois	Lead	Mine Tailings
Hayzlett Branch	0285	Nodaway	Habitat Degradation	Rural NPS
Hazel Creek	0642	Adair	Habitat Degradation	Rural NPS
Headwater Diversion Channel	2196	Cape Girardeau	Habitat Degradation	Rural NPS
Heaths Creek, Tributary	3532	Pettis	Habitat Degradation	Rural NPS
Heaths Creek, Tributary	3533	Pettis	Habitat Degradation	Rural NPS
Heaths Creek, Tributary	3534	Pettis	Habitat Degradation	Rural NPS
Heaths Creek, Tributary	3535	Pettis	Habitat Degradation	Rural NPS
Heath's Creek, Tributary to Tributary	3536	Pettis	Habitat Degradation	Rural NPS
Henry Creek	0870	Pettis	Habitat Degradation	Rural NPS
Henry Creek	3525	Pettis	Habitat Degradation	Rural NPS
Henry Creek, Tributary	3801	Pettis	Habitat Degradation	Rural NPS
Hess Creek, Tributary	3802	Pettis	Habitat Degradation	Rural NPS
Hickory Branch	0596	Chariton	Habitat Degradation	Rural NPS
Hickory Creek	0186	Audrain	Habitat Degradation	Rural NPS
Hickory Creek	0308	Holt	Habitat Degradation	Rural NPS
Hickory Creek	0335	Andrew	Habitat Degradation	Rural NPS
Hickory Creek	0490	Gentry	Habitat Degradation	Rural NPS
Hickory Creek, Tributary	0589	Grundy	Habitat Degradation	Rural NPS
High Creek	0229	Atchison	Habitat Degradation	Rural NPS
High Creek Ditch	0228	Atchison	Habitat Degradation	Rural NPS
High Creek, Tributary	0232	Atchison	Habitat Degradation	Rural NPS
Highly Creek	0307	Holt	Habitat Degradation	Rural NPS
Hightower Creek	3646	Vernon	Habitat Degradation	Rural NPS
Hillers Creek	0728	Callaway	Low Dissolved Oxygen	Rural NPS
Hog Creek	0660	Adair	Habitat Degradation	Rural NPS
Hogan's Fork	3425	Johnson	Habitat Degradation	Rural NPS
Hogan's Fork, Tributary	3426	Johnson	Habitat Degradation	Rural NPS
Holland Branch	0350	Platte	Habitat Degradation	Rural NPS
Holtzclaw Creek	0351	Clay	Habitat Degradation	Rural NPS
Honey Creek	0042	Clark	Habitat Degradation	Rural NPS

Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Honey Creek	0338	Nodaway	Habitat Degradation	Rural NPS
Honey Creek	0509	Daviess	Habitat Degradation	Rural NPS
Honey Creek	0888	Cooper	Habitat Degradation	Rural NPS
Honey Creek	0919	Johnson	Habitat Degradation	Rural NPS
Honey Creek	1251	Henry	Low Dissolved Oxygen	Rural NPS
Honey Cypress Ditch	3121	Dunklin	Habitat Degradation	Rural NPS
Hoover Creek	0127	Macon	Habitat Degradation	Rural NPS
Horse Creek	1348	Cedar	Low Dissolved Oxygen	Rural NPS
Horse Fork	0354	Clinton	Habitat Degradation	Rural NPS
Horseshoe Creek	3413	Lafayette	Low Dissolved Oxygen	Rural NPS
Huff Creek	0306	Nodaway	Habitat Degradation	Rural NPS
Huffstetter Lateral	3101	Stoddard	Habitat Degradation	Rural NPS
Hunnewell Lake	7029	Shelby	Mercury	Atmospheric Deposition
Hurricane Branch	0435	Daviess	Habitat Degradation	Rural NPS
Hurricane Creek	0632	Carroll	Habitat Degradation	Rural NPS
Imboden Fork	2741	Reynolds	Unknown	Unknown
Indian Branch	0432	Livingston	Habitat Degradation	Rural NPS
Indian Camp Creek	0212	Warren	Low Dissolved Oxygen	Rural NPS
Indian Creek	0062	Scotland	Habitat Degradation	Rural NPS
Indian Creek	0104	Monroe	Habitat Degradation	Rural NPS
Indian Creek	0171	Pike	Habitat Degradation	Rural NPS
Indian Creek	0477	Gentry	Habitat Degradation	Rural NPS
Indian Creek	0573	Harrison	Habitat Degradation	Rural NPS
Indian Hills Lake	7288	Crawford	Mercury	Atmospheric Deposition
Iowa Ditch	0234	Atchison	Habitat Degradation	Rural NPS
Irvins Branch	0494	Dekalb	Habitat Degradation	Rural NPS
Irwin Creek	0558	Mercer	Habitat Degradation	Rural NPS
Ishmael Branch	1964	Washington	Habitat Degradation	Abandoned Barite Mined Lands, Urban NPS
Island Creek	0485	Gentry	Habitat Degradation	Rural NPS
Jacobs Branch	3223	Newton	Zinc	Abandoned Lead –Zinc Mines
James Bayou	3128	Mississippi	Habitat Degradation	Rural NPS
James Bayou	3129	Mississippi	Habitat Degradation	Rural NPS
James River	2347	Stone	Mercury	Atmospheric Deposition
Jamesport Community Lake	7105	Daviess	Mercury	Atmospheric Deposition
Jenkins Creek	0286	Nodaway	Habitat Degradation	Rural NPS

Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Joachim Creek	1719	Jefferson	Lead	Doe Run Herculaneum Smelter
Johns Branch	0184	Pike	Habitat Degradation	Rural NPS
Jones Creek	3205	Jasper	E. coli	Rural NPS
Jordan Branch	0275	Platte	Habitat Degradation	Rural NPS
Jordan Creek	0329	Dekalb	Habitat Degradation	Rural NPS
Jordan Creek	0911	Saline	Habitat Degradation	Rural NPS
Jowler Creek	3571	Platte	Habitat Degradation	Rural NPS
Keeney Creek	0384	Ray	Habitat Degradation	Rural NPS
Kettle Creek	0516	Daviess	Habitat Degradation	Rural NPS
Kimsey Creek	0262	Holt	Habitat Degradation	Rural NPS
Kimsey Creek	0263	Holt	Habitat Degradation	Rural NPS
Kimsey Creek	0264	Holt	Habitat Degradation	Rural NPS
Kings Valley	3255	McDonald	Nickel	Unknown
Kinnemore Ditch	3122	Dunklin	Habitat Degradation	Rural NPS
Kitten Creek	1334	Vernon	Habitat Degradation	Rural NPS
Knob Creek	1303	Bates	Habitat Degradation	Rural NPS
Koen Creek	2171	St. Francois	Lead	Mine Tailings
Kyle Creek	3195	Dade	Habitat Degradation	Rural NPS
Labelle Lake #2	7023	Lewis	Mercury	Atmospheric Deposition
Ladies Branch	1332	Vernon	Habitat Degradation	Rural NPS
Lake Creek	0359	Chariton	Habitat Degradation	Rural NPS
Lake Creek	0431	Livingston	Habitat Degradation	Rural NPS
Lake Creek	0875	Pettis	Habitat Degradation	Rural NPS
Lake Creek	3527	Pettis	Habitat Degradation	Rural NPS
Lake Creek, Tributary	0876	Pettis	Habitat Degradation	Rural NPS
Lake Creek, Tributary	3514	Pettis	Habitat Degradation	Rural NPS
Lake of the Woods	7436	Boone	Mercury	Atmospheric Deposition
Lake Slough	2774	Butler	Habitat Degradation	Rural NPS
Lake Ste. Louise	7055	St. Charles	Bacteria	Urban NPS
Lake Winnebago	7212	Cass	Mercury	Atmospheric Deposition
Lakewood Lake	7100	Jackson	Mercury	Atmospheric Deposition
Landon Branch	1329	Vernon	Habitat Degradation	Rural NPS
Larry Creek	0507	Daviess	Habitat Degradation	Rural NPS
Lateral #2	3025	Pemiscot	Habitat Degradation	Rural NPS
Lateral #2 to Main Ditch	3106	Stoddard	Habitat Degradation	Rural NPS
Lateral #4	3149	Scott	Habitat Degradation	Rural NPS
Lateral #27	3027	Dunklin	Habitat Degradation	Rural NPS

Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Lateral #27	3033	Pemiscot	Habitat Degradation	Rural NPS
Lateral Ditch	3008	Butler	Habitat Degradation	Rural NPS
Lateral Ditch	3010	Butler	Habitat Degradation	Rural NPS
Lateral Ditch #1	3114	Dunklin	Habitat Degradation	Rural NPS
Lateral Ditch #2	3113	Dunklin	Habitat Degradation	Rural NPS
Lateral Ditch #37	3007	Butler	Habitat Degradation	Rural NPS
Lead Creek	0178	Lincoln	Altered Fish Community	Rural NPS
Lead Creek	0179	Lincoln	Altered Fish Community	Rural NPS
Lee Rowe Ditch	3137	Mississippi	Habitat Degradation	Rural NPS
Leeper Creek	0624	Livingston	Habitat Degradation	Rural NPS
Lewis Slough	0235	Atchison	Habitat Degradation	Rural NPS
Lick Creek	0150	Ralls	Habitat Degradation	Rural NPS
Lick Creek	0256	Cass	Habitat Degradation	Rural NPS
Lick Creek Ditch	2980	Stoddard	Habitat Degradation	Rural NPS
Lick Fork	0514	Daviess	Habitat Degradation	Rural NPS
Lick Fork	0515	Daviess	Habitat Degradation	Rural NPS
Lick Fork	1024	Boone	Sediment	Mining
Lick Fork	3439	Lafayette	Habitat Degradation	Rural NPS
Lincoln Creek	0280	Andrew	Habitat Degradation	Rural NPS
Lincoln Creek, Tributary	0281	Andrew	Habitat Degradation	Rural NPS
Linn Creek	0041	Clark	Habitat Degradation	Rural NPS
Little Blackwater Creek	0922	Johnson	Habitat Degradatio	Rural NPS
Little Blue River	0424	Jackson	Habitat Degradation	Rural NPS
Little Bonne Femme Creek	1003	Boone	Low Dissolved Oxygen	Rural NPS
Little Brush Creek	0673	Macon	Habitat Degradation	Rural NPS
Little Chariton River	0678	Chariton	Habitat Degradation	Rural NPS
Little Clear Creek	1340	St. Clair	Habitat Degradation	Rural NPS
Little Clear Creek, Tributary	1341	St. Clair	Habitat Degradation	Rural NPS
Little Coon Creek	3192	Barton	Habitat Degradation	Rural NPS
Little Creek	0452	Harrison	Habitat Degradation	Rural NPS
Little Creek	0923	Johnson	Habitat Degradation	Rural NPS
Little Crooked Creek	0118	Shelby	Habitat Degradation	Rural NPS
Little Dardenne Creek	0223	St. Charles	Unknown	Urban NPS
Little Deer Creek	1277	Bates	Habitat Degradation	Rural NPS
Little Drywood Creek, Tributary	3649	Vernon	Habitat Degradation	Rural NPS

Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Little East Fork Locust Creek	0609	Sullivan	Habitat Degradation	Rural NPS
Little Fabius River	0079	Knox	Habitat Degradation	Rural NPS
Little Fox River	0039	Clark	Habitat Degradation	Rural NPS
Little Fox River	0040	Scotland	Habitat Degradation	Rural NPS
Little Horseshoe Creek	3690	Lafayette	Habitat Degradation	Rural NPS
Little Hurricane Creek	0633	Carroll	Habitat Degradation	Rural NPS
Little Lead Creek	0181	Lincoln	Altered Fish Community	Rural NPS
Little Monegaw Creek	1232	St. Clair	Habitat Degradation	Rural NPS
Little Muddy Creek	0440	Daviess	Habitat Degradation	Rural NPS
Little Muddy Creek	0559	Mercer	Habitat Degradation	Rural NPS
Little Muddy Creek	0856	Pettis	Color	Industrial Discharge
Little Muddy Creek, Tributary	3491	Pettis	Habitat Degradation	Rural NPS
Little Muddy Creek, Tributary	3489	Pettis	Habitat Degradation	Rural NPS
Little Mussel Creek	0675	Adair	Habitat Degradation	Rural NPS
Little No Creek	0552	Grundy	Habitat Degradation	Rural NPS
Little North Fork Spring River	3200	Jasper	Habitat Degradation	Rural NPS
Little North Fork Spring River, Tributary	3201	Barton	Habitat Degradation	Rural NPS
Little Osage River	1310	Vernon	Habitat Degradation	Rural NPS
Little Osage River	3674	Vernon	Habitat Degradation	Rural NPS
Little Otter Creek	0120	Monroe	Habitat Degradation	Rural NPS
Little Otter Creek	0526	Caldwell	Habitat Degradation	Rural NPS
Little Platte River	0315	Platte	Habitat Degradation	Rural NPS
Little Platte River	0352	Clinton	Habitat Degradation	Rural NPS
Little River	0562	Mercer	Habitat Degradation	Rural NPS
Little River, Old Channel	3041	New Madrid	Habitat Degradation	Rural NPS
Little Shaver Creek	0863	Pettis	Habitat Degradation	Rural NPS
Little Shoal Creek	0651	Putnam	Habitat Degradation	Rural NPS
Little Shoal Creek	3325	Clay	Habitat Degradation	Rural NPS
Little Sni-A-Bar Creek	0403	Lafayette	Habitat Degradation	Rural NPS
Little Sni-A-Bar Creek	0404	Lafayette	Habitat Degradation	Rural NPS
Little St. Francis River	2854	Madison	Low Dissolved Oxygen, Nickel, Lead	Rural NPS, Mine Tailings
Little Sugar Creek	3249	McDonald	Nickel	Unknown
Little Tabo Creek	0409	Lafayette	Habitat Degradation	Rural NPS
Little Tarkio Creek	0250	Atchison	Habitat Degradation	Rural NPS
Little Tarkio Creek, Old	0260	Holt	Habitat Degradation	Rural NPS

Channel				
Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Little Tarkio Creek, Old Channel	0261	Holt	Habitat Degradation	Rural NPS
Little Tarkio Ditch	0251	Holt	Habitat Degradation	Rural NPS
Little Tavern Creek	1076	Maries	Bacteria	Rural NPS
Little Tebo Creek	1205	Benton	Habitat Degradation	Rural NPS
Little Tebo Creek, Tributary	3295	Benton	Habitat Degradation	Rural NPS
Little Tebo Creek, Tributary	3304	Benton	Habitat Degradation	Rural NPS
Little Third Fork Platte River	0328	Dekalb	Habitat Degradation	Rural NPS
Little Walnut Creek	0662	Macon	Habitat Degradation	Rural NPS
Little Walnut Creek	0938	Johnson	Habitat Degradation	Rural NPS
Little Whitewater Creek	2229	Bollinger	Unknown	Unknown
Little Wyaconda River	0052	Clark	Habitat Degradation	Rural NPS
Little Wyaconda River	0053	Clark	Habitat Degradation	Rural NPS
Littleby Creek	0147	Audrain	Habitat Degradation	Rural NPS
Log Creek	0533	Caldwell	Habitat Degradation	Rural NPS
Long Branch	0139	Monroe	Habitat Degradation	Rural NPS
Long Branch	0243	Atchison	Habitat Degradation	Rural NPS
Long Branch	0340	Nodaway	Habitat Degradation	Rural NPS
Long Branch	0488	Gentry	Habitat Degradation	Rural NPS
Long Branch	0677	Chariton	Habitat Degradation	Rural NPS
Long Branch	0857	Johnson	Habitat Degradation	Rural NPS
Long Branch	1843	Pettis	Habitat Degradation	Rural NPS
Long Branch	3430	Johnson	Habitat Degradation	Rural NPS
Long Branch Lake	7171	Macon	Mercury	Atmospheric Deposition
Long Branch, Tributary	3502	Pettis	Habitat Degradation	Rural NPS
Long Creek	0535	Caldwell	Habitat Degradation	Rural NPS
Long Creek	0669	Chariton	Habitat Degradation	Rural NPS
Long Grove Branch	0851	Pettis	Habitat Degradation	Rural NPS
Long Grove Branch	3531	Pettis	Habitat Degradation	Rural NPS
Longview Lake	7097	Jackson	Mercury	Atmospheric Deposition
Lost Creek	0495	Dekalb	Habitat Degradation	Rural NPS
Lost Creek	0643	Schuyler	Habitat Degradation	Rural NPS
Lotts Creek	0466	Worth	Habitat Degradation	Rural NPS
Lumpkin Creek	0425	Jackson	Habitat Degradation	Rural NPS
Mace Creek	0267	Andrew	Habitat Degradation	Rural NPS
Main Ditch	3026	Pemiscot	Habitat Degradation	Rural NPS

Main Ditch	3112	Dunklin	Habitat Degradation	Rural NPS
Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Main Ditch	3115	Stoddard	Habitat Degradation	Rural NPS
Main Ditch #8	3031	Pemiscot	Habitat Degradation	Rural NPS
Main Ditch #8	3032	Pemiscot	Habitat Degradation	Rural NPS
Malaruni Creek	0010	Ralls	Habitat Degradation	Rural NPS
Malone Creek	2277	Bollinger	Habitat Degradation	Rural NPS
Maple Slough	3140	Mississippi	Habitat Degradation	Rural NPS
Marais Des Cygnes River	1297	Bates	Habitat Degradation	Rural NPS
Marlin Creek	0852	Pettis	Habitat Degradation	Rural NPS
Marlin Creek	3485	Pettis	Habitat Degradation	Rural NPS
Marlowe Creek	0474	Worth	Habitat Degradation	Rural NPS
Marlowe Creek	0475	Worth	Habitat Degradation	Rural NPS
Marmaton River	1308	Vernon	Low Dissolved Oxygen	Rural NPS
Marrowbone Creek	0508	Daviess	Habitat Degradation	Rural NPS
Marrowbone Creek	0511	Daviess	Habitat Degradation	Rural NPS
Marshalls Creek	1221	Henry	Habitat Degradation	Rural NPS
Martin Creek	0570	Gentry	Habitat Degradation	Rural NPS
Mass Creek	0302	Nodaway	Habitat Degradation	Rural NPS
Massey Creek	1267	Cass	Habitat Degradation	Rural NPS
Massey Creek, Tributary	1268	Cass	Habitat Degradation	Rural NPS
May Branch	3540	Pettis	Habitat Degradation	Rural NPS
McCarty Creek	1338	Vernon	pH	Unknown
McElroy Creek	0231	Atchison	Habitat Degradation	Rural NPS
McGee Branch	3510	Pettis	Habitat Degradation	Rural NPS
McGuire Branch	0324	Clinton	Habitat Degradation	Rural NPS
McKenzie Creek	3643	Wayne	Habitat Degradation	Rural NPS
McKill Creek	1321	Vernon	pH	Abandoned Coal Mined Lands
McKill Creek	1324	Vernon	Habitat Degradation	Rural NPS
McLean Creek	0031	Lincoln	Habitat Degradation	Rural NPS
Medicine Creek	0616	Livingston	Habitat Degradation	Rural NPS
Melton Creek	3637	Vernon	Habitat Degradation	Rural NPS
Meramec River	1841	Franklin	Mercury	Atmospheric Deposition
Merrills Branch	0084	Marion	Habitat Degradation	Rural NPS
Miami Creek	1302	Bates	Habitat Degradation	Rural NPS
Middle Big Creek	3415	Cass	Low Dissolved Oxygen	Rural NPS
Middle Branch Squaw Creek	0258	Holt	Habitat Degradation	Rural NPS

Middle Creek	0567	Grundy	Habitat Degradation	Rural NPS
Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Middle Fabius River	0063	Lewis	Habitat Degradation, Atrazine	Rural NPS
Middle Fork Chariton River	0691	Chariton	Habitat Degradation	Rural NPS
Middle Fork Chariton River	0698	Macon	Habitat Degradation	Rural NPS
Middle Fork Grand River	0472	Worth	Habitat Degradation	Rural NPS
Middle Fork Grand River, Tributary	0473	Worth	Habitat Degradation	Rural NPS
Middle Fork Lost Creek	0496	Dekalb	Habitat Degradation	Rural NPS
Middle Fork Salt River	0123	Macon	Habitat Degradation	Rural NPS
Middle Fork Salt River, Tributary	0125	Macon	Habitat Degradation	Rural NPS
Middle Fork Tebo Creek, Tributary	1289	Henry	Habitat Degradation	Rural NPS
Middle Fork Tebo Creek, Tributary	1286	Henry	Habitat Degradation	Rural NPS
Middle Fork Tebo Creek, Tributary	1287	Henry	Habitat Degradation	Rural NPS
Middle Fork Tebo Creek, Tributary	1285	Henry	Habitat Degradation	Rural NPS
Middle Indian Creek	3263	Newton	Unknown	Unknown
Middle Tarkio Creek	0245	Atchison	Habitat Degradation	Rural NPS
Mill Creek	0159	Lincoln	Habitat Degradation	Rural NPS
Mill Creek	0265	Holt	Habitat Degradation	Rural NPS
Mill Creek	0266	Holt	Habitat Degradation	Rural NPS
Mill Creek	0301	Nodaway	Habitat Degradation	Rural NPS
Mill Creek	0529	Caldwell	Habitat Degradation	Rural NPS
Mill Creek	2124	Washington	Habitat Degradation	Wastewater Discharge
Mill Creek	3311	Cass	Habitat Degradation	Rural NPS
Mill Creek, Tributary	0303	Nodaway	Habitat Degradation	Rural NPS
Milligan Creek	0134	Monroe	Habitat Degradation	Rural NPS
Mineral Creek	3422	Johnson	Habitat Degradation	Rural NPS
Mineral Creek, Tributary	3423	Johnson	Habitat Degradation	Rural NPS
Mingo Ditch	2983	Stoddard	Habitat Degradation	Rural NPS
Mississippi River	0001	St. Charles	PCB	Industrial Discharge
Mississippi River	1707	Perry	PCB, Chlordane	Industrial Discharge, Urban NPS
Mississippi River	3152	Pemiscot	PCB, Chlordane	Industrial Discharge, Urban NPS
Mississippi River	4000	St. Louis	PCB, Chlordane	Industrial Discharge, Urban NPS
Missouri River	0226	Holt	Habitat Degradation	Channelization

Missouri River	0356	Carroll	Habitat Degradation	Channelization
Waterbody	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Missouri River	0701	Callaway	Habitat Degradation	Channelization
Missouri River	1604	St. Charles	Habitat Degradation	Channelization
Missouri River, Tributary	0411	Saline	Habitat Degradation	Rural NPS
Moccasin Creek	0483	Gentry	Habitat Degradation	Rural NPS
Monegaw Creek	1233	St. Clair	Habitat Degradation	Rural NPS
Moore Branch	1328	Vernon	Habitat Degradation	Rural NPS
Moore's Branch	1315	Vernon	Habitat Degradation	Rural NPS
Moore's Branch	1316	Vernon	Habitat Degradation	Rural NPS
Mormon Fork	1275	Bates	Habitat Degradation	Rural NPS
Moss Creek	0369	Carroll	Habitat Degradation	Rural NPS
Moss Creek, Tributary	0370	Carroll	Habitat Degradation	Rural NPS
Mound Creek	0626	Livingston	Habitat Degradation	Rural NPS
Mouse Creek	0426	Jackson	Habitat Degradation	Rural NPS
Mozingo Creek	0343	Nodaway	Habitat Degradation	Rural NPS
Mud Creek	0128	Randolph	Habitat Degradation	Rural NPS
Mud Creek	0538	Caldwell	Habitat Degradation	Rural NPS
Mud Creek	0541	Ray	Habitat Degradation	Rural NPS
Mud Creek Ditch	0537	Livingston	Habitat Degradation	Rural NPS
Mud Creek, Old Channel	0547	Livingston	Habitat Degradation	Rural NPS
Mud Creek, Tributary	0546	Caldwell	Habitat Degradation	Rural NPS
Mud Creek, Tributary	0545	Caldwell	Habitat Degradation	Rural NPS
Mud Creek, Tributary	0544	Caldwell	Habitat Degradation	Rural NPS
Mud Ditch	3124	New Madrid	Habitat Degradation	Rural NPS
Muddy Creek	0291	Nodaway	Habitat Degradation	Rural NPS
Muddy Creek	0434	Daviess	Habitat Degradation	Rural NPS
Muddy Creek	0492	Daviess	Habitat Degradation	Rural NPS
Muddy Creek	0557	Mercer	Habitat Degradation	Rural NPS
Muddy Creek	0607	Linn	Habitat Degradation	Rural NPS
Muddy Creek	0617	Livingston	Habitat Degradation	Rural NPS
Muddy Creek	0898	Saline	Habitat Degradation	Rural NPS
Muddy Creek	1309	Vernon	Habitat Degradation	Rural NPS
Muddy Creek	3308	Cass	Habitat Degradation	Rural NPS
Muddy Creek	3769	Linn	Habitat Degradation	Rural NPS
Muddy Creek, Tributary	0618	Grundy	Habitat Degradation	Rural NPS
Muddy Creek, Tributary	3488	Petis	Habitat Degradation	Rural NPS

Muddy Creek, Tributary	3492	Pettis	Habitat Degradation	Rural NPS
Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Muddy Creek, Tributary	3494	Pettis	Habitat Degradation	Rural NPS
Muddy Creek, Tributary	3495	Pettis	Habitat Degradation	Rural NPS
Muddy Creek, Tributary	3499	Pettis	Habitat Degradation	Rural NPS
Muddy Fork	0391	Clay	Altered Aquatic Community	Rural NPS
Mulberry Creek	3635	Vernon	Habitat Degradation	Rural NPS
Mulkey Creek	0916	Johnson	Habitat Degradation	Rural NPS
Muncas Creek	0692	Chariton	Habitat Degradation	Rural NPS
Muncas Creek	0693	Randolph	Habitat Degradation	Rural NPS
Mussel Fork Creek	0674	Macon	Habitat Degradation	Rural NPS
Narrows Creek	0126	Macon	Habitat Degradation	Rural NPS
Naylor Creek	0277	Platte	Habitat Degradation	Rural NPS
Neals Creek	2752	Iron	Lead, Nickel in Stream Sediments	Abandoned Lead-Zinc Mine
New #7 Chute	3157	Mississippi	Habitat Degradation	Rural NPS
New Franklin Ditch	3016	Pemiscot	Habitat Degradation	Rural NPS
New Hope Cr.	0392	Clay	Habitat Degradation	Rural NPS
Nichols Creek	0309	Holt	Habitat Degradation	Rural NPS
Nichols Creek, Tributary	0310	Holt	Habitat Degradation	Rural NPS
Nishnabotna River	0227	Atchison	Habitat Degradation	Rural NPS
Nishnabotna River, Old Channel	0238	Atchison	Habitat Degradation	Rural NPS
Nishnabotna River, Old Channel	0240	Atchison	Habitat Degradation	Rural NPS
Nishnabotna River, Tributary to Old Channel	0239	Atchison	Habitat Degradation	Rural NPS
Nishnabotna River, Tributary to Old Channel	0241	Atchison	Habitat Degradation	Rural NPS
Nodaway River	0279	Nodaway	Habitat Degradation	Rural NPS
Nodaway River, Old Channel	0284	Holt	Habitat Degradation	Rural NPS
Nodaway River, Old Channel	0297	Nodaway	Habitat Degradation	Rural NPS
Nodaway River, Old Channel	0300	Nodaway	Habitat Degradation	Rural NPS
Nodaway River, Old Channel	0305	Nodaway	Habitat Degradation	Rural NPS
Nodaway River, Old Channel	0311	Holt	Habitat Degradation	Rural NPS
Nodaway River, Old Channel	0296	Nodaway	Habitat Degradation	Rural NPS
Nodaway River, Old Channel	0299	Nodaway	Habitat Degradation	Rural NPS
Nodaway River, Old Channel	0304	Nodaway	Habitat Degradation	Rural NPS
Nodaway River, Old Channel	0294	Nodaway	Habitat Degradation	Rural NPS
Nodaway River, Old Channel	0295	Nodaway	Habitat Degradation	Rural NPS

Nodaway River, Old Channel	0298	Nodaway	Habitat Degradation	Rural NPS
Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Norris Creek	1252	Henry	Habitat Degradation	Rural NPS
North Cut Ditch	3143	Scott	Habitat Degradation	Rural NPS
North Cut Ditch	3145	Scott	Habitat Degradation	Rural NPS
North Cut Ditch, Tributary	3144	Scott	Habitat Degradation	Rural NPS
North Cut Ditch, Tributary	3148	Scott	Habitat Degradation	Rural NPS
North Deepwater Creek	1218	Henry	Habitat Degradation	Rural NPS
North Dry Sac River	1392	Polk	Low Dissolved Oxygen	Rural NPS
North Fabius River	0059	Schuyler	Habitat Degradation	Rural NPS
North Fork Batts Creek	0681	Howard	Habitat Degradation	Rural NPS
North Fork Blackwater River	0920	Johnson	Habitat Degradation	Rural NPS
North Fork Finney Creek	0904	Saline	Habitat Degradation	Rural NPS
North Fork Middle Fabius River	0065	Scotland	Habitat Degradation	Rural NPS
North Fork Middle Fabius River	3702	Schuyler	Habitat Degradation	Rural NPS
North Fork North Fabius River	0058	Scotland	Habitat Degradation	Rural NPS
North Fork Salt River	0113	Adair	Habitat Degradation	Rural NPS
North Fork South Fabius River	0075	Knox	Habitat Degradation	Rural NPS
North Fork Spring River, Tributary	3196	Barton	Habitat Degradation	Rural NPS
North Indian Creek	3260	Newton	Cadmium, Zinc	Unknown
North Mud Creek	0540	Caldwell	Habitat Degradation	Rural NPS
North River	0080	Marion	Habitat Degradation	Rural NPS
North River	0083	Shelby	Habitat Degradation	Rural NPS
North Wyaconda R.iver	0049	Scotland	Habitat Degradation	Rural NPS
North Wyaconda River	0048	Scotland	Habitat Degradation	Rural NPS
Norvey Creek	0344	Nodaway	Habitat Degradation	Rural NPS
Number 13 Elk Chute	3034	Pemiscot	Habitat Degradation	Rural NPS
Old Mines Creek, Tributary	2114	Washington	Sediment Deposition	Abandoned Barite Mined Lands
Old Mines Creek, Tributary	2113	Washington	Sediment Deposition	Abandoned Barite Mined Lands
Old Town Branch	1331	Vernon	Habitat Degradation	Rural NPS
Old Town Branch, Tributary	3647	Vernon	Habitat Degradation	Rural NPS
Olive Branch	3504	Pettis	Habitat Degradation	Rural NPS
One Hundred and Two River	0342	Nodaway	Habitat Degradation,	Rural NPS

			Atrazine	
Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Opossum Creek	3190	Jasper	Habitat Degradation	Rural NPS
Osage Fork	1472	Laclede	Bacteria	Unknown
Otter Creek	0119	Monroe	Habitat Degradation	Rural NPS
Otter Creek	0525	Caldwell	Habitat Degradation	Rural NPS
Otter Creek	0887	Cooper	Habitat Degradation	Rural NPS
Otter Slough	3044	New Madrid	Habitat Degradation	Rural NPS
Otter Slough Ditch	2976	Stoddard	Habitat Degradation	Rural NPS
Owens Creek	1274	Cass	Habitat Degradation	Rural NPS
Owl Creek	2167	St. Francois	Lead	Mine Tailings
Owl Creek	3572	Platte	Habitat Degradation	Rural NPS
Painter Creek	3486	Pettis	Habitat Degradation	Rural NPS
Palmer Creek	0357	Chariton	Habitat Degradation	Rural NPS
Palmer Creek	0358	Chariton	Habitat Degradation	Rural NPS
Panther Creek	0460	Gentry	Habitat Degradation	Rural NPS
Panther Creek	0521	Caldwell	Habitat Degradation	Rural NPS
Panther Creek	0575	Harrison	Habitat Degradation	Rural NPS
Panther Creek	0576	Harrison	Habitat Degradation	Rural NPS
Panther Creek	1260	Johnson	Habitat Degradation	Rural NPS
Panther Creek	1295	Bates	Habitat Degradation	Rural NPS
Panther Creek, Tributary	0522	Caldwell	Habitat Degradation	Rural NPS
Parker Branch	1304	Bates	Habitat Degradation	Rural NPS
Parson Creek	0614	Linn	Habitat Degradation	Rural NPS
Parson Creek	0615	Linn	Habitat Degradation	Rural NPS
Pass Branch	0900	Saline	Habitat Degradation	Rural NPS
Peavine Creek	0914	Johnson	Habitat Degradation	Rural NPS
Peddler Creek	0469	Gentry	Habitat Degradation	Rural NPS
Peddler Creek	0470	Gentry	Habitat Degradation	Rural NPS
Pedlar Creek	0283	Andrew	Habitat Degradation	Rural NPS
Peno Creek	0099	Pike	Low Dissolved Oxygen	Rural NPS
Pepper Creek	0868	Pettis	Habitat Degradation	Rural NPS
Perche Creek	1005	Boone	Habitat Degradation	Rural NPS
Pettis Creek	3193	Barton	Habitat Degradation	Rural NPS
Pigeon Creek	0349	Buchanan	Habitat Degradation	Rural NPS
Pigeon Roost Creek	0109	Monroe	Habitat Degradation	Rural NPS
Pike Creek Ditch	2813	Butler	Habitat Degradation	Rural NPS

Pike Creek, Ditch to	2819	Butler	Habitat Degradation	Rural NPS
Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Pike Slough	2817	Butler	Habitat Degradation	Rural NPS
Pilot Grove Creek	0439	Daviess	Habitat Degradation	Rural NPS
Pilot Knob Creek	2894	Iron	Cadmium, Lead	Lead Mining
Pin Oak Creek	0926	Johnson	Habitat Degradation	Rural NPS
Platte River	0312	Platte	Habitat Degradation, Atrazine	Rural NPS
Platte River, Old Channel	0325	Buchanan	Habitat Degradation	Rural NPS
Platte River, Old Channel	0332	Buchanan	Habitat Degradation	Rural NPS
Platte River, Old Channel	0341	Buchanan	Habitat Degradation	Rural NPS
Platte River, Old Channel	0326	Buchanan	Habitat Degradation	Rural NPS
Platte River, Old Channel	0348	Buchanan	Habitat Degradation	Rural NPS
Plattin Creek	1728	Jefferson	Dissolved Oxygen	Wastewater Discharge
Pleasant Run Creek	1327	Vernon	Habitat Degradation	Rural NPS
Pointers Creek	1460	Osage	Habitat Degradation	Rural NPS
Polecat Creek	0445	Harrison	Habitat Degradation	Rural NPS
Pond Creek, Tributary	2128	Washington	Sediment	Abandoned Barite Mined Lands
Poney Creek	3312	Cass	Habitat Degradation	Rural NPS
Poney Creek	3313	Cass	Habitat Degradation	Rural NPS
Postoak Creek	0928	Johnson	Habitat Degradation	Rural NPS
Prairie Creek	0313	Platte	Habitat Degradation	Rural NPS
Prairie Creek, Tributary	0314	Platte	Habitat Degradation	Rural NPS
Prairie Lee Lake	7102	Jackson	Mercury	Atmospheric Deposition
Pryor Creek	3655	Vernon	Habitat Degradation	Rural NPS
Puzzle Creek	0666	Chariton	Habitat Degradation	Rural NPS
Raccoon Creek	0586	Grundy	Habitat Degradation	Rural NPS
Raccoon Creek, Tributary	0587	Grundy	Habitat Degradation	Rural NPS
Ramsey Branch	2194	Cape Girardeau	Habitat Degradation	Rural NPS
Ramsey Creek	0020	Pike	Habitat Degradation	Rural NPS
Ramsey Creek Diversion Channel	2343	Scott	Habitat Degradation	Rural NPS
Rattlesnake Creek	0520	Livingston	Habitat Degradation	Rural NPS
Reed Creek	3654	Vernon	Habitat Degradation	Rural NPS
Reese Fork	0136	Monroe	Habitat Degradation	Rural NPS
Reid Creek	1236	St. Clair	Habitat Degradation	Rural NPS
Ricky Creek	1237	St. Clair	Habitat Degradation	Rural NPS

Riggin Branch	0347	Andrew	Habitat Degradation	Rural NPS
Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Rinquelin Trail Lake	7204	Maries	Mercury	Atmospheric Deposition
Roach Lake	0627	Livingston	Habitat Degradation	Rural NPS
Roberts Branch	0355	Clinton	Habitat Degradation	Rural NPS
Robinson Branch	3638	Vernon	Habitat Degradation	Rural NPS
Robinson Creek	3558	Phelps	Habitat Degradation	Wastewater Discharge
Rock Creek	0078	Knox	Habitat Degradation	Rural NPS
Rock Creek	0236	Atchison	Habitat Degradation	Rural NPS
Rock Creek	0237	Atchison	Habitat Degradation	Rural NPS
Rock Creek	3323	Clay	Habitat Degradation	Rural NPS
Rocky Fork	0378	Ray	Habitat Degradation	Rural NPS
Rocky Fork	1014	Boone	Sediment	Abandoned Mine Lands
Rocky Hollow	3639	Vernon	Habitat Degradation	Rural NPS
Rollins Creek	0382	Ray	Habitat Degradation	Rural NPS
Roubidoux Creek	1512	Pulaski	Low Dissolved Oxygen	Unknown
Rush Creek	3322	Clay	Habitat Degradation	Rural NPS
Sac River	1398	Greene	Bacteria	Unknown
Saline Creek	1048	Miller	Unknown	Unknown
Sals Creek	2345	Scott	Habitat Degradation	Rural NPS
Sals Creek Diversion Channel	2344	Scott	Habitat Degradation	Rural NPS
Salt Branch	0413	Saline	Habitat Degradation	Rural NPS
Salt Branch	0901	Saline	Habitat Degradation	Rural NPS
Salt Creek	0594	Chariton	Habitat Degradation	Rural NPS
Salt Creek	1228	St. Clair	Habitat Degradation	Rural NPS
Salt Creek, Tributary	1229	St. Clair	Habitat Degradation	Rural NPS
Salt Fork	0893	Saline	Habitat Degradation	Rural NPS
Salt Fork	0899	Saline	Habitat Degradation	Rural NPS
Salt Pond Creek	0908	Saline	Habitat Degradation	Rural NPS
Salt Pond Creek	0910	Saline	Habitat Degradation	Rural NPS
Sampson Creek	0453	Daviess	Habitat Degradation	Rural NPS
Sampson Creek	0455	Gentry	Habitat Degradation	Rural NPS
Sand Creek	0290	Nodaway	Habitat Degradation	Rural NPS
Sand Creek	0644	Schuyler	Habitat Degradation	Rural NPS
Sand Creek	1290	Henry	Habitat Degradation	Rural NPS

Sandy Creek	0029	Lincoln	Habitat Degradation	Rural NPS
Sandy Creek	0183	Pike	Habitat Degradation	Rural NPS
Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Sandy Creek	0571	Mercer	Habitat Degradation	Rural NPS
Second Creek	0317	Platte	Habitat Degradation	Rural NPS
Sees Creek	0088	Marion	Habitat Degradation	Rural NPS
Sees Creek	0089	Marion	Habitat Degradation	Rural NPS
Sewer Branch	0860	Pettis	Low Dissolved Oxygen	Rural NPS
Shackelford Branch	0385	Ray	Habitat Degradation	Rural NPS
Shain Creek	0450	Harrison	Habitat Degradation	Rural NPS
Shankton Creek	0621	Putnam	Habitat Degradation	Rural NPS
Sharpsburg Branch	0087	Marion	Habitat Degradation	Rural NPS
Shaver Creek	0862	Pettis	Habitat Degradation	Rural NPS
Shaver Creek, Tributary	3505	Pettis	Habitat Degradation	Rural NPS
Shaver Creek, Tributary	3506	Pettis	Habitat Degradation	Rural NPS
Shaver Creek, Tributary	3507	Pettis	Habitat Degradation	Rural NPS
Sheep Creek	0530	Caldwell	Habitat Degradation	Rural NPS
Shell Branch	0105	Monroe	Habitat Degradation	Rural NPS
Shibboleth Creek	2120	Washington	Sediment Deposition	Abandoned Barite Mined Lands
Shipley Slough	2971	Dunklin	Habitat Degradation	Rural NPS
Shoal Creek	0396	Clay	Habitat Degradation	Rural NPS
Shoal Creek	0397	Clay	Habitat Degradation	Rural NPS
Shoal Creek	0518	Caldwell	Habitat Degradation	Rural NPS
Shoal Creek	0528	Caldwell	Habitat Degradation	Rural NPS
Shoal Creek Ditch	0519	Livingston	Habitat Degradation	Rural NPS
Shootman Creek	0639	Carroll	Habitat Degradation	Rural NPS
Shuteye Creek	0656	Adair	Habitat Degradation	Rural NPS
Silver Creek	0683	Randolph	Habitat Degradation	Rural NPS
Silver Creek	3244	Newton	Zinc	Unknown
Simms Creek	1342	St. Clair	Habitat Degradation	Rural NPS
Skull Creek	0890	Cooper	Habitat Degradation	Rural NPS
Smith Fork	0353	Clinton	Habitat Degradation	Rural NPS
Smithville Lake	7077	Clay	Mercury	Atmospheric Deposition
Sni-A-Bar Creek	0401	Jackson	Habitat Degradation	Rural NPS
South Big Creek	0506	Daviess	Habitat Degradation	Rural NPS

South Blackbird Creek	0655	Putnam	Ammonia	Unionville WWTP
South Brush Creek	0108	Monroe	Habitat Degradation	Rural NPS
Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
South Davis Creek	0913	Lafayette	Habitat Degradation	Rural NPS
South Deepwater Creek	1219	Bates	Habitat Degradation	Rural NPS
South Fabius River	0071	Marion	Habitat Degradation	Rural NPS
South Flat Creek	0869	Pettis	Habitat Degradation	Rural NPS
South Flat Creek	3299	Benton	Habitat Degradation	Rural NPS
South Flat Creek, Tributary	3526	Pettis	Habitat Degradation	Rural NPS
South Flat Creek, Tributary	3300	Benton	Habitat Degradation	Rural NPS
South Fork	0939	Pettis	Habitat Degradation	Rural NPS
South Fork, Tributary	3547	Pettis	Habitat Degradation	Rural NPS
South Fork Blackwater River	0924	Johnson	Habitat Degradation	Rural NPS
South Fork Blackwater River, Tributary	0925	Johnson	Habitat Degradation	Rural NPS
South Fork Clear Creek	0293	Nodaway	Habitat Degradation	Rural NPS
South Fork Gees Creek	0591	Livingston	Habitat Degradation	Rural NPS
South Fork Middle Fabius River	0067	Scotland	Habitat Degradation	Rural NPS
South Fork Middle Fabius River	0068	Schuyler	Habitat Degradation	Rural NPS
South Fork North Fabius River	0060	Schuyler	Habitat Degradation	Rural NPS
South Fork North Fabius River, Tributary	0061	Schuyler	Habitat Degradation	Rural NPS
South Fork North River	0085	Marion	Habitat Degradation	Rural NPS
South Fork North River	0086	Marion	Habitat Degradation	Rural NPS
South Fork Salt River	0141	Monroe	Habitat Degradation, Low Dissolved Oxygen	Rural NPS, Wastewater Discharge
South Fork Salt River, Tributary	0146	Audrain	Habitat Degradation	Rural NPS
South Fork South Fabius River	0076	Knox	Habitat Degradation	Rural NPS
South Fork South Fabius River	0077	Knox	Habitat Degradation	Rural NPS
South Fork South Grand River	1269	Cass	Habitat Degradation	Rural NPS
South Grand River	1249	Cass	Habitat Degradation	Rural NPS
South Mud Creek	0542	Ray	Habitat Degradation	Rural NPS
South Wyaconda River	0050	Clark	Atrazine	Rural NPS
Sparrow Foot Creek	1212	Henry	Habitat Degradation	Rural NPS
Spencer Creek	0224	St. Charles	Habitat Degradation	Rural NPS

Spillway Ditch	3134	New Madrid	Habitat Degradation	Rural NPS
Spring Creek	0657	Adair	Habitat Degradation	Rural NPS
Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Spring Creek	2979	Stoddard	Habitat Degradation	Rural NPS
Spring Fork	0871	Pettis	Habitat Degradation	Rural NPS
Spring Fork	3513	Pettis	Habitat Degradation	Rural NPS
Spring Fork, Tributary	0872	Pettis	Habitat Degradation	Rural NPS
Spring Fork, Tributary	3515	Pettis	Habitat Degradation	Rural NPS
Squaw Creek	0252	Holt	Habitat Degradation	Rural NPS
St. Francis River	2968	Dunklin	Habitat Degradation	Rural NPS
St. James Bayou	3132	Mississippi	Habitat Degradation	Rural NPS
St. James Ditch	3133	New Madrid	Habitat Degradation	Rural NPS
St. John's Bayou	3123	New Madrid	Habitat Degradation	Rural NPS
St. John's Ditch	3150	Scott	Habitat Degradation	Rural NPS
St. John's Diversion Ditch	3125	New Madrid	Habitat Degradation	Rural NPS
St. John's Diversion Ditch	3127	Mississippi	Habitat Degradation	Rural NPS
Stanley Creek	3001	Wayne	Habitat Degradation	Rural NPS
Sterett Creek	1204	Benton	Habitat Degradation	Rural NPS
Stillcamp Ditch	2810	Butler	Habitat Degradation	Rural NPS
Stillhouse Branch	0489	Gentry	Habitat Degradation	Rural NPS
Stinking Creek	0700	Macon	Habitat Degradation	Rural NPS
Sugar Creek	0043	Clark	Habitat Degradation	Rural NPS
Sugar Creek	0044	Clark	Habitat Degradation	Rural NPS
Sugar Creek	0054	Lewis	Habitat Degradation	Rural NPS
Sugar Creek	0156	Lincoln	Habitat Degradation	Rural NPS
Sugar Creek	0270	Platte	Habitat Degradation	Rural NPS
Sugar Creek	0271	Buchanan	Habitat Degradation	Rural NPS
Sugar Creek	0581	Grundy	Habitat Degradation	Rural NPS
Sugar Creek	0582	Harrison	Habitat Degradation	Rural NPS
Sugar Creek	0641	Adair	Habitat Degradation	Rural NPS
Sugar Creek	1261	Cass	Habitat Degradation	Rural NPS
Sweet Spring Creek	0685	Randolph	Habitat Degradation	Rural NPS
Sweezer Creek	0699	Macon	Habitat Degradation	Rural NPS
Swift Ditch	3151	New Madrid	Mercury	Atmospheric Deposition
Tabo Creek	0405	Lafayette	Habitat Degradation	Rural NPS
Tabo Creek	0406	Lafayette	Habitat Degradation	Rural NPS

Tarkio River	0242	Atchison	Habitat Degradation	Rural NPS
Tater Hill Creek	0636	Carroll	Habitat Degradation	Rural NPS
Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Tater Hill Creek, Tributary	0637	Carroll	Habitat Degradation	Rural NPS
Tebo Creek	1280	Henry	Low Dissolved Oxygen	Rural NPS
Tebo Creek	1281	Henry	Habitat Degradation	Rural NPS
Teeter Creek	2551	Douglas	Habitat Degradation	Rural NPS
Tenmile Pond	3130	Mississippi	Habitat Degradation	Rural NPS
Tennessee Creek	1263	Cass	Habitat Degradation	Rural NPS
Thief Creek	0646	Schuyler	Habitat Degradation	Rural NPS
Third Fork Platte River	0327	Buchanan	Habitat Degradation	Rural NPS
Third Fork Platte River	3704	Dekalb	Habitat Degradation	Rural NPS
Thompson Branch	0458	Gentry	Habitat Degradation	Rural NPS
Thompson Creek	0437	Daviess	Habitat Degradation	Rural NPS
Thompson River, Old Channel	0568	Grundy	Habitat Degradation	Rural NPS
Thompson River, Old Channel	0569	Grundy	Habitat Degradation	Rural NPS
Thompson River, Old Channel	0579	Grundy	Habitat Degradation	Rural NPS
Thompson River, Old Channel	0580	Grundy	Habitat Degradation	Rural NPS
Thompson River, Old Channel	0592	Livingston	Habitat Degradation	Rural NPS
Tiger Fork	0082	Shelby	Habitat Degradation	Rural NPS
Tobin Creek	0064	Scotland	Habitat Degradation	Rural NPS
Tombstone Creek	0584	Harrison	Habitat Degradation	Rural NPS
Tombstone Creek	0585	Harrison	Habitat Degradation	Rural NPS
Townsend Slough	3675	Vernon	Habitat Degradation	Rural NPS
Towstring Creek	0631	Livingston	Habitat Degradation	Rural NPS
Trail Creek	0577	Harrison	Habitat Degradation	Rural NPS
Trail Creek	0578	Harrison	Habitat Degradation	Rural NPS
Troublesome Cr.	0074	Lewis	Habitat Degradation	Rural NPS
Truitt Creek	3174	Lawrence	Low Dissolved Oxygen	Rural NPS
Tub Creek	0534	Caldwell	Habitat Degradation	Rural NPS
Turkey Creek	0138	Monroe	Habitat Degradation	Rural NPS
Turkey Creek	0361	Carroll	Habitat Degradation	Rural NPS
Turkey Creek	0362	Carroll	Habitat Degradation	Rural NPS
Turkey Creek	0486	Gentry	Habitat Degradation	Rural NPS

Turkey Creek	0523	Caldwell	Habitat Degradation	Rural NPS
Turkey Creek	0605	Linn	Habitat Degradation	Rural NPS
Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Turkey Creek	0647	Putnam	Habitat Degradation	Rural NPS
Turkey Creek	0663	Macon	Habitat Degradation	Rural NPS
Turkey Creek	0854	Pettis	Habitat Degradation	Rural NPS
Turkey Creek	3217	Jasper	Lead, Zinc, Cadmium in sediments	Abandoned Lead-Zinc Mined Lands
Turkey Creek, Tributary	3487	Pettis	Habitat Degradation	Rural NPS
Turkey Creek, Tributary	0524	Caldwell	Habitat Degradation	Rural NPS
Turkey Creek, Tributary	0664	Macon	Habitat Degradation	Rural NPS
Twomile Creek	1313	Vernon	Habitat Degradation	Rural NPS
Van Meter Ditch	0412	Saline	Habitat Degradation	Rural NPS
Varney River Ditch	2969	Dunklin	Habitat Degradation	Rural NPS
Varney River Ditch	2970	Dunklin	Habitat Degradation	Rural NPS
Village Creek	2864	Madison	Lead, Zinc in sediments	Abandoned Lead-Zinc Mined Lands
Wades Creek	1291	Henry	Habitat Degradation	Rural NPS
Wakenda Creek	0360	Carroll	Habitat Degradation	Rural NPS
Wakenda Creek	0364	Carroll	Habitat Degradation	Rural NPS
Wakenda Creek, Old Channel	0368	Carroll	Habitat Degradation	Rural NPS
Wakonda Lake	7002	Lewis	Lead (in fish)	Unknown
Walnut Creek	0661	Adair	Habitat Degradation	Rural NPS
Walnut Creek	0687	Randolph	Habitat Degradation	Rural NPS
Walnut Creek	0873	Pettis	Habitat Degradation	Rural NPS
Walnut Creek	0918	Johnson	Habitat Degradation	Rural NPS
Walnut Creek	0937	Johnson	Habitat Degradation	Rural NPS
Walnut Creek	1306	Bates	Habitat Degradation	Rural NPS
Walnut Creek	1339	St. Clair	Low Dissolved Oxygen	El Dorado Springs WWTP
Walnut Creek	3512	Pettis	Habitat Degradation	Rural NPS
Walnut Creek	3521	Pettis	Habitat Degradation	Rural NPS
Walnut Creek	3634	Vernon	Habitat Degradation	Rural NPS
Walnut Fork	0487	Gentry	Habitat Degradation	Rural NPS
Wamsley Creek	0505	Dekalb	Habitat Degradation	Rural NPS
Weatherby Lake	7071	Platte	Mercury	Atmospheric Deposition
Weldon Branch	0459	Gentry	Habitat Degradation	Rural NPS
Weldon River, Old Channel	0561	Grundy	Habitat Degradation	Rural NPS

Wellson Slough	3573	Platte	Habitat Degradation	Rural NPS
Wellson Slough	3574	Platte	Habitat Degradation	Rural NPS
West Branch	1318	Barton	Habitat Degradation	Rural NPS
Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
West Branch Crawford Creek	1256	Jackson	Habitat Degradation	Rural NPS
West Cow Creek	0897	Saline	Habitat Degradation	Rural NPS
West Ditch	3111	Dunklin	Habitat Degradation	Rural NPS
West Fork	3198	Barton	Habitat Degradation	Rural NPS
West Fork Bee Branch	0668	Chariton	Habitat Degradation	Rural NPS
West Fork Big Creek	0451	Harrison	Habitat Degradation	Rural NPS
West Fork Clear Creek	1335	Vernon	Habitat Degradation	Rural NPS
West Fork Clear Creek, Tributary	3641	Vernon	Habitat Degradation	Rural NPS
West Fork Crooked River	0379	Ray	Habitat Degradation	Rural NPS
West Fork Crooked River	0380	Ray	Habitat Degradation	Rural NPS
West Fork Cuivre River	0185	Audrain	Habitat Degradation	Rural NPS
West Fork East Creek	3310	Cass	Habitat Degradation	Rural NPS
West Fork Finney Creek	0905	Saline	Habitat Degradation	Rural NPS
West Fork Finney Creek, Tributary	0906	Saline	Habitat Degradation	Rural NPS
West Fork Honey Creek	0556	Mercer	Habitat Degradation	Rural NPS
West Fork Locust Creek	0613	Sullivan	Altered Aquatic Community	Rural NPS
West Fork Lost Creek	0499	Dekalb	Habitat Degradation	Rural NPS
West Fork Lost Creek, Tributary	0501	Dekalb	Habitat Degradation	Rural NPS
West Fork Lost Creek, Tributary	0500	Dekalb	Habitat Degradation	Rural NPS
West Fork Postoak Creek	0929	Johnson	Habitat Degradation	Rural NPS
West Fork Postoak Creek, Tributary	0930	Johnson	Habitat Degradation	Rural NPS
West Fork Wakenda Creek	0366	Carroll	Habitat Degradation	Rural NPS
West Fork Wakenda Creek	0367	Ray	Habitat Degradation	Rural NPS
West High Creek	0230	Atchison	Habitat Degradation	Rural NPS
West Lick Creek	0149	Monroe	Habitat Degradation	Rural NPS
West Locust Creek	0611	Putnam	Habitat Degradation	Rural NPS
West Muddy Creek	0564	Grundy	Habitat Degradation	Rural NPS
West Muddy Creek	0566	Mercer	Habitat Degradation	Rural NPS
West Muddy Creek, Tributary	0565	Mercer	Habitat Degradation	Rural NPS
West Tarkio Creek	0244	Atchison	Habitat Degradation	Rural NPS

West Tarkio Creek	0246	Atchison	Habitat Degradation	Rural NPS
West Yellow Creek	0599	Linn	Habitat Degradation	Rural NPS
West Yellow Creek	0600	Sullivan	Habitat Degradation	Rural NPS
Name	WBID	Primary County	Potential Pollutant or Condition	Potential Source
Wheeler Creek	0503	Dekalb	Habitat Degradation	Rural NPS
Whetstone Creek	1505	Wright	Ammonia	Mountain Grove WWTP
White Branch	1330	Vernon	Habitat Degradation	Rural NPS
White Cloud Creek	0345	Nodaway	Habitat Degradation	Rural NPS
White Cloud Creek	0346	Nodaway	Habitat Degradation	Rural NPS
White Oak Creek	0454	Harrison	Habitat Degradation	Rural NPS
White Oak Creek	1279	Henry	Habitat Degradation	Rural NPS
Wildcat Creek	0259	Holt	Habitat Degradation	Rural NPS
Wildcat Creek	0480	Gentry	Habitat Degradation	Rural NPS
Wildcat Creek	0482	Gentry	Habitat Degradation	Rural NPS
Wildcat Creek, Tributary	0481	Gentry	Habitat Degradation	Rural NPS
Wildcat Creek, Tributary	0484	Nodaway	Habitat Degradation	Rural NPS
Wilkerson Ditch	3126	Mississippi	Habitat Degradation	Rural NPS
Williams Creek	0387	Clay	Unknown	Unknown
Williams Creek	3172	Lawrence	Unknown	Unknown
Willow Creek	0381	Ray	Habitat Degradation	Rural NPS
Willow Creek	0498	Gentry	Habitat Degradation	Rural NPS
Willow Creek	0543	Caldwell	Habitat Degradation	Rural NPS
Willow Creek	3653	Vernon	Habitat Degradation	Rural NPS
Wilson Branch	3640	Vernon	Habitat Degradation	Rural NPS
Winnegan Creek	0598	Linn	Habitat Degradation	Rural NPS
Winn's Creek	0122	Macon	Habitat Degradation	Rural NPS
Wolf Hole Lateral	3136	Mississippi	Habitat Degradation	Rural NPS
Wyaconda River	0047	Lewis	Habitat Degradation	Rural NPS
Yellow Creek	0595	Chariton	Habitat Degradation	Rural NPS
Yellow Creek	1230	St. Clair	Habitat Degradation	Rural NPS
Yellow Creek, Tributary	1231	St. Clair	Habitat Degradation	Rural NPS
Youngs Creek	0140	Audrain	Habitat Degradation	Rural NPS
Zadie Creek	0448	Harrison	Habitat Degradation	Rural NPS
Zounds Branch	0479	Gentry	Habitat Degradation	Rural NPS

Appendix II

Total Maximum Daily Load Completion Schedule

Table 17. Tentative Schedule for the Completion of Total Maximum Daily Load Studies.

Water Body Name	WBID	From	To	County	Pollutant ¹	Source ²	TMDL Scheduled
Big River	2074*	Mouth	Sur 3166,40N,3D	Jefferson	Lead	Old Lead Belt AML	2008
Big River	2080*	Sur 3166,40N,3D	12,35N,1E	Jefferson, Washington	Inorganic Sediment	Old Lead Belt AML	2008
Big River	2080*	Sur 3166,40N,3D	12,35N,1E	Jefferson, Washington	Lead	Old Lead Belt AML	2008
Flat River Creek	2168*	Mouth	21,36N,4E	St. Francois	Inorganic Sediment	Old Lead Belt AML	2008
Flat River Creek	2168*	Mouth	21,36N,4E	St. Francois	Lead	Old Lead Belt AML	2008
Flat River Creek	2168*	Mouth	21,36N,4E	St. Francois	Zinc	Old Lead Belt AML	2008
Lateral #2 Main Ditch	3105*	24,23N,10E	25,25N,10E	Stoddard	Sediment	Agricultural NPS	2008
Shaw Branch	2170*	Mouth	20,36N,5E	St. Francois	Inorganic Sediment	Old Lead Belt AML	2008
Shaw Branch	2170*	Mouth	20,36N,5E	St. Francois	Lead	Old Lead Belt AML	2008
Bear Creek	115U*	near Kirksville		Adair	Unknown		2009
Big Bottom Creek	1746*	Mouth	Lake Anne	Ste. Genevieve	Low DO	Lake Forest Subdivision	2009
Big Bottom Creek	1746*	Mouth	Lake Anne	Ste. Genevieve	Organic Sediment	Lake Forest Subdivision	2009
Buffalo Ditch	3118*	State Line	11,18N,9E	Dunklin	Low DO	Kennett WWTP	2009
Buffalo Ditch	3118	State Line	11,18N,9E	Dunklin	Ammonia	Kennett WWTP	2009
Cave Spring Branch	3245U*			McDonald	Nutrients	Simmons Industries, Livestock	2009
Courtois Creek	1943	Mouth	17,35N,1W	Crawford, Washington	Lead	Viburnum 29 Mine	2009
Courtois Creek	1943	Mouth	17,35N,1W	Crawford, Washington	Zinc	Viburnum 29 Mine	2009
Hickory Creek	442*	Mouth	11,60N,28W	Daviess	Unknown		2009
Hickory Creek, Trib. to	589*	Mouth	9,60N,25W	Grundy	Unknown		2009
Hinkson Creek	1007*	Mouth	Hwy 163	Boone	Unknown		2009
Hinkson Creek	1008	Hwy 163	36,50N,12W	Boone	Bacteria		2009

Hinkson Creek	1008	Hwy 163	36,50N,12W	Boone	Unknown		2009
Indian Camp Creek	212*	6,47N,1E	4,47N,1W	St. Charles, Warren	Inorganic sediment	JZ Landfill	2009
Indian Creek	1946	Mouth	17,35N,1E	Washington	Lead	Viburnum 29 Mine	2009
Indian Creek	1946*	Mouth	17,35N,1E	Washington	Zinc	Viburnum 29 Mine	2009
Indian Creek, Tributary to	3663	Mouth	7,35N,1W	Washington	Lead	Viburnum 29 Mine	2009
Indian Creek, Tributary to	3663	Mouth	7,35N,1W	Washington	Zinc	Viburnum 29 Mine	2009
Little Osage River	3652*	18,37N,31W	18,37N,33W	Vernon	Low DO		2009
Long Branch	857*	06,45N,23W	09,45N,24W	Pettis, Johnson	Unknown		2009
Marmaton River	1308*	19,38N,29W	State Line	Vernon	Low DO		2009
McKenzie Creek	2786	Mouth	23,29N,3E	Wayne	Low DO	Piedmont WWTP	2009
Mississippi River	1707*	Ohio R.	Dam #27	Mississippi, St. Louis	Lead	Herculaneum Smelter	2009
Mississippi River	1707*	Ohio R.	Dam #27	Mississippi, St. Louis	Zinc	Herculaneum Smelter	2009
Mound Branch	1300*	Mouth	13,40N,31W	Bates	Low DO	Butler WWTP	2009
Muddy Creek	557*	Mouth	22,66N,23W	Grundy, Mercer	Unknown		2009
Ozarks, Lake of the	7205*	SE SE19,40N,15W		Camden	Fish Trauma	Truman Dam	2009
Pearson Creek	2373	Mouth	5,29N,20W	Greene	Bacteria	Urban NPS	2009
Pearson Creek	2373*	Mouth	5,29N,20W	Greene	Unknown toxicity	Urban NPS	2009
Piper Creek (Town Branch)	1444*	Mouth	Hwy 83	Polk	Organic Sediment	Bolivar WWTP	2009
Piper Creek (Town Branch)	1444	Mouth	Hwy 83	Polk	Unknown		2009
Pond Creek, Trib. to	2128*	Mouth	3,37N,3E	Washington	Inorganic Sediment	Barite Tailings Pond	2009
Sandy Creek	652*	Mouth	19,66N,17W	Putnam	Unknown		2009
Shibboleth Creek	2120*	14,38N,3E	21,38N,3E	Washington	Inorganic Sediment	Barite Tailings Pond	2009
Spring Branch (Creek)	3708*	02,34N,06W	Hwy. 32	Dent	Low DO	Salem WWTP	2009
Spring Branch (Creek)	3708*	02,34N,06W	Hwy. 32	Dent	Organic Sediment	Salem WWTP	2009
Stinson Creek	710*	Mouth	16,47N,9W	Callaway	Low DO	Fulton WWTP	2009
Stinson Creek	710*	Mouth	16,47N,9W	Callaway	Organic Sediment	Fulton WWTP	2009
Straight Fork	959	6,43N,17W	36,43N,18W	Morgan	Chloride	Versailles WWTP	2009

Taneycomo, Lake	7314*	SW NE8,23N,20W		Taney	Low DO	Table Rock Dam	2009
Village Creek	2863	Mouth	5,33N,7E	Madison	Inorganic Sediment	Old Lead Belt AML	2009
Village Creek	2863	Mouth	5,33N,7E	Madison	Lead	Old Lead Belt AML	2009
Village Creek	2864*	5,33N,7E	34,34N,7E	Madison	Inorganic Sediment	Old Lead Belt AML	2009
West Fork Black River	2755*	Mouth	25,33N,03W	Reynolds	Nutrients	West Fork Mine	2009
West Fork Locust Creek	612*	Mouth	Hwy. 67	Linn, Sullivan	Unknown		2009
West Fork Locust Creek	613*	Hwy. 6	33,64N,21W	Sullivan	Unknown		2009
Willow Branch	0654U*			Putnam	Unknown		2009
Wilson Creek	2375	Mouth	16,29N,22W	Greene	Bacteria	Multiple Point Sources/ Urban NPS	2009
Wilson Creek	2375*	Mouth	16,29N,22W	Greene	Unknown toxicity	Multiple Point Sources/ Urban NPS	2009
Big River	2080	Sur 3166,40N,3D	12,35N,1E	Jefferson, Washington	Cadmium	Old Lead Belt AML	2010
Big River	2080	Sur 3166,40N,3D	12,35N,1E	Jefferson, Washington	Zinc	Old Lead Belt AML	2010
Center Creek	3203	14,28N,34W	34,28N,31	Jasper	Cadmium	Tri-State AML	2010
Center Creek	3203	14,28N,34W	34,28N,31	Jasper	Lead	Tri-State AML	2010
Douger Branch	3168	Mouth	7,26N,25W	Lawrence	Cadmium	Baldwin Park Mine	2010
Douger Branch	3168	Mouth	7,26N,25W	Lawrence	Lead	Baldwin Park Mine	2010
Eaton Branch	2166	Mouth	9,36N,4E	St. Francois	Cadmium	Old Lead Belt AML	2010
Eaton Branch	2166	Mouth	9,36N,4E	St. Francois	Lead	Old Lead Belt AML	2010
Eaton Branch	2166	Mouth	9,36N,4E	St. Francois	Zinc	Old Lead Belt AML	2010
Flat Creek	865	13,45N,21W	02,43N,23W	Pettis	Unknown		2010
Flat River Creek	2168	Mouth	21,36N,4E	St. Francois	Cadmium	Old Lead Belt AML	2010
Fowler Creek	747	Mouth	13,46N,12W	Boone	Low DO		2010
Indian Creek	420	Mouth	State Line	Jackson	Bacteria	Multiple Point Sources/ Urban NPS	2010
Indian Creek	420	Mouth	State Line	Jackson	Chloride	Multiple Point Sources/ Urban NPS	2010
Lewistown Lake	7020	NW SW8,61N,8W		Lewis	Atrazine	Agricultural NPS	2010
Little Beaver Creek	1529	Mouth	8,37N,8W	Phelps	Low DO	Rolla SW WWTP	2010
Red Oak Creek	2038	28,42N,4W	16,41N,5W	Gasconade	Low DO	Owensville WWTP	2010
Shaw Branch	2170	Mouth	20,36N,5E	St. Francois	Cadmium	Federal AML	2010

Ste. Louise, Lake	7055	SW SW27,47N,02E		St. Charles	Bacteria	Urban NPS	2010
Straight Fork	959	6,43N,17W	36,43N,18W	Morgan	Low DO	Versailles WWTP	2010
Trib. To Red Oak Creek	3360	Mouth	35,42N,5W	Gasconade	Low DO	Owensville WWTP	2010
Trib. To Red Oak Creek	3361	35,42N,5W	27,42N,5W	Gasconade	Low DO	Owensville WWTP, NPS	2010
Turkey Creek	3216	State Line	35,28N,33W	Jasper	Cadmium	Tri-State AML	2010
Turkey Creek	3282	Mouth	Hwy 47	St. Francois	Cadmium	Old Lead Belt AML	2010
Turkey Creek	3282	Mouth	Hwy 47	St. Francois	Lead	Old Lead Belt AML	2010
Turkey Creek	3282	Mouth	Hwy 47	St. Francois	Zinc	Old Lead Belt AML	2010
Blue River	417	Mouth	Guinotte Dam	Jackson	Bacteria	Urban NPS	2011
Blue River	418	Guinotte Dam	59th St.	Jackson	Bacteria	Urban NPS	2011
Blue River	419	59th St.	Bannister Rd.	Jackson	Bacteria	Urban NPS	2011
Blue River	421	Bannister Rd	State Line	Jackson	Bacteria	Urban NPS	2011
Bobs Creek	35	34,49N,2E	27,50,1E	Lincoln	Low DO	Lincoln Co. WWTF	2011
Bonne Femme Creek	750	Mouth	20,47N,12W	Boone	Bacteria	Urban/Rural NPS	2011
Burgher Branch	1865	Mouth	07,37N,07W	Phelps	Low DO		2011
Coldwater Creek	1706	Mouth	Hwy. 67	St. Louis	Chloride	Urban NPS	2011
Creve Coeur Creek	1703	Creve Coeur Lk	1mi. S. of Hwy. 340	St. Louis	Bacteria	Urban NPS	2011
Creve Coeur Creek	1703	Creve Coeur Lk	1mi. S. of Hwy. 341	St. Louis	Chloride	Urban NPS	2011
Dutro Carter Creek	3569	Mouth	Hwy 72	Phelps	Low DO	Rolla SE WWTP	2011
Dutro Carter Creek	3569	Mouth	Hwy 72	Phelps	Ammonia	Rolla SE WWTP	2011
Fishpot Creek	2186	Mouth	13,44N,05E	St. Louis	Bacteria	Urban NPS	2011
Grand Glaize Creek	2184	Mouth	9,44N,5E	St. Louis	Chloride	Urban NPS	2011
Gravois Creek	1712	Mouth	24,44N,6E	St. Louis City, St. Louis	Bacteria	Urban NPS	2011
Gravois Creek	1713	24,44N,6E	Hwy. 30	St. Louis	Bacteria	Urban NPS	2011
Gravois Creek	1713	24,44N,6E	Hwy. 30	St. Louis	Chloride	Urban NPS	2011
Grindstone Creek	1009	Mouth	20,48N,12W	Boone	Bacteria	Unknown	2011
Little Dry Fork	1863	Mouth	8,37N,7W	Phelps	Low DO	Rolla SE WWTP	2011
Little Dry Fork	1864	8,37N,7W	5,36N,7W	Phelps	Low DO	Rolla SE WWTP	2011
Long Branch Creek	696	5,58N,14W	19,60N,14W	Macon	Low DO	Atlanta WWTP	2011
Maline Creek	1709	Mouth	Bellefontaine Rd	St. Louis City, St. Louis	Chloride	Urban NPS	2011
River des Peres	1711	Gravois Cr.	Morgan Ford Road	St. Louis City	Chloride	Urban NPS	2011

River des Peres	1711U001	at University City		St. Louis	Chloride	Urban NPS	2011
Watkins Creek	1708	Mouth	Hwy. 270	St. Louis City, St. Louis	Bacteria	Urban NPS	2011
Watkins Creek	1708	Mouth	Hwy. 270	St. Louis City, St. Louis	Chloride	Urban NPS	2011
Bee Fork	2760	Mouth	30,32N,1W	Reynolds	Lead	Fletcher Mine	2012
Big Creek	444	Mouth	9,63N,28W	Daviess, Harrison	Ammonia	Bethany WWTP	2012
Big Creek	444	Mouth	9,63N,28W	Daviess, Harrison	Low DO	Bethany WWTP	2012
Blackberry Creek	3185	Mouth	28,30N,33W	Jasper	Sulfate + Chloride	Asbury Power Plant	2012
Brush Creek	1371	31,36N,24W	16,35N,24W	St. Clair, Polk	Low DO	Humansville WWTP	2012
Brush Creek	1371	31,36N,24W	16,35N,24W	St. Clair, Polk	Organic Sediment	Humansville WWTP	2012
Crooked Creek	1928	Mouth	33,35N,2W	Crawford	Cadmium	Buick Smelter	2012
Crooked Creek	1928	Mouth	33,35N,2W	Crawford	Lead	Buick Smelter	2012
Dardenne Creek	221	Sur 1704,47N,4E	22,46N,2E	St. Charles	Inorganic Sediment	Unknown	2012
Dardenne Creek	222	22,46N,2E	22,46N,1E	St. Charles	Inorganic Sediment	Unknown	2012
Dousinbury Creek	1180	Mouth	17,33N,18W	Dallas	Bacteria	Agricultural NPS	2012
East Fork Chariton River	682	Mouth	Long Br. Dam	Randolph	Sulfate	Multiple AMLs	2012
East Fork Tebo Creek	1282	31,43N,24W	45,44N,24W	Henry	Low DO	Windsor SW WWTP	2012
Main Ditch	2814	18,22N,6E	10,24N,6E	Butler	Ammonia	Poplar Bluff WWTP	2012
Main Ditch	2814	18,22N,6E	10,24N,6E	Butler	pH	Poplar Bluff WWTP	2012
Main Ditch	2814	18,22N,6E	10,24N,6E	Butler	Temperature	Channelization	2012
Niangua River	1170	Bennett Spr Cr.	33,32N,18W	Dallas	Bacteria	Rural NPS	2012
Peruque Creek	217	Hwy. 40/61	25,47N,1E	St. Charles	Inorganic Sediment	Urban/Rural NPS	2012
Peruque Creek	218	25,47N,1E	23,47N,1W	St. Charles	Inorganic Sediment	Urban/Rural NPS	2012
Pickle Creek	1755	Mouth	19,36N,7E	Ste. Genevieve	pH	Atmospheric Deposition	2012
Saline Creek, Trib. to	2859U			Madison	Nickel		2012
Stockton Branch	1361	Mouth	4,34N,26W	Cedar	Low DO	Stockton WWTP	2012
Strother Creek	2751U			Reynolds	Zinc	Buick Mine	2012
Walt Disney Lake	7137	05,57N,18W		Linn	Chloride		2012

West Fork Medicine Creek	623	9,61N,22W	State Line	Grundy, Mercer	Unknown	Unknown	2012
Capps Creek	3234	Mouth	17, 25N,28W	Newton, Barry	Bacteria	Rural NPS	2013
Chariton River	640	Mouth	State Line	Chariton, Putnam	Bacteria	Rural NPS	2013
Clear Creek	3238	Mouth	28,26N,28W	Newton, Lawrence	Bacteria	Rural NPS	2013
East Fork Grand River	457	Mouth	29,66N,30W	Gentry, Worth	Bacteria	Rural NPS	2013
East Fork Medicine Creek	619	9,61N,22W	State Line	Grundy, Putnam	Bacteria	Rural NPS	2013
Fabius River	55	Mouth	24,59N,6W	Marion	Bacteria	Rural NPS	2013
Grand River	593	Mouth	Shoal Cr.	Chariton, Livingston	Bacteria	Rural NPS	2013
Hickory Creek	3226	Mouth	28,25N,31W	Newton	Bacteria	Rural NPS	2013
Indian Creek	3256	Mouth	24,24N,31W	McDonald, Newton	Bacteria	Rural NPS	2013
Lamine River	847	Mouth	13,45N,19W	Cooper	Bacteria	Rural NPS	2013
Locust Creek	606	Mouth	State Line	Chariton, Putnam	Bacteria	Rural NPS	2013
Lost Creek	3278	State Line	14,25N,33W	Newton	Bacteria	Rural NPS	2013
Middle Fork Grand River	468	Mouth	12,66N,31W	Gentry, Worth	Bacteria	Rural NPS	2013
Missouri River	1604	Mouth	Gasconade R.	St. Louis, Gasconade	Bacteria	Rural NPS	2013
Mussel Fork Creek	674	18,58N,17W	2,62N,18W	Macon, Sullivan	Bacteria	Rural NPS	2013
No Creek	550	Mouth	14,62N,23W	Grundy	Bacteria	Rural NPS	2013
North Fork Cuivre River	170	24,51N,3W	28,52N,3W	Pike	Bacteria	Rural NPS	2013
North Fork Spring River	3188	1,29N,32W	20,30N,28W	Barton	Low DO	Lamar WWTP, NPS	2013
North Fork Spring River	3188	1,29N,32W	20,30N,28W	Barton	Ammonia	Lamar WWTP	2013
North Fork Spring River	3188	1,29N,32W	20,30N,28W	Barton	Unknown	Unknown	2013
South Grand River	1249	Mouth	02,44N,33W	Henry, Cass	Bacteria	Rural NPS	2013
Spring River	3160	State Line	20,28N,27W	Jasper, Lawrence	Bacteria	Rural NPS	2013
St. Johns Ditch	3138	29,23N,15E	25,28N,13E	New Madrid, Scott	Bacteria	Rural NPS	2013
Turkey Creek	3216	State Line	35,28N,33W	Jasper	Bacteria	Rural NPS	2013

Warm Fork Spring River	2579	State Line	25,23N,6W	Oregon	Bacteria	Rural NPS	2013
Weldon River	560	Mouth	State Line	Grundy, Mercer	Bacteria	Rural NPS	2013
West Fork Medicine Creek	623	9,61N,22W	State Line	Grundy, Mercer	Bacteria	Rural NPS	2013
Clear Creek	3239	28,26N,28W	36,26N,28W	Lawrence, Barry	Low DO		2014
Clear Creek	3239	28,26N,28W	36,26N,28W	Lawrence, Barry	Nutrients		2014
Coldwater Creek	1706	Mouth	Hwy. 67	St. Louis	Low DO		2014
Creve Coeur Creek	1703	Creve Coeur Lk	1mi. S. of Hwy. 340	St. Louis	Low DO		2014
Dardenne Creek	221	Sur 1704,47N,4E	22,46N,2E	St. Charles	Unknown		2014
Dardenne Creek	219	Mouth	Sur 1704,47N,4E	St. Charles	Low DO		2014
Dardenne Creek	222	22,46N,2E	22,46N,1E	St. Charles	Low DO		2014
Ditch #36	3109	Mouth	21,19N,10E	Dunklin	Low DO		2014
Ditch to Buffalo Ditch	3120	Mouth	2,18N,9E	Dunklin	Low DO		2014
East Fork Locust Creek	608	Mouth	Hwy 6	Sullivan	Low DO	Rural NPS	2014
Fassnight Creek	3370	27,29N,22W	25,29N,22W	Greene	Low DO		2014
Fishpot Creek	2186	Mouth	13,44N,05E	St. Louis	Low DO		2014
Gravois Creek	1713	24,44N,6E	Hwy. 30	St. Louis	Low DO	Unknown	2014
Lateral #2 Main Ditch	3105	24,23N,10E	25,25N,10E	Stoddard	Low DO		2014
Little Muddy Creek, Tributary to	3490	Mouth	14,46N,22W	Pettis	Chloride	Tyson Foods	2014
Little Muddy Creek, Tributary to	3490	Mouth	14,46N,22W	Pettis	Color	Tyson Foods	2014
Little Niangua River	1189	Mouth	26,36N,19W	Camden, Dallas	Low DO		2014
Muddy Creek	853	Mouth	17,45N,23W	Pettis, Johnson	Chloride	Tyson Foods	2014
Muddy Creek	853	Mouth	17,45N,23W	Pettis	Color	Tyson Foods	2014
Osage River	1031	Mouth	Bagnell Dam	Osage, Miller	Low DO		2014
Sni-a-Bar Creek	399	Mouth	30,48N,29W	Lafayette, Jackson	Low DO		2014
Stevenson Bayou	3135	33,25N,16E	31,27N,17E	Mississippi	Low DO		2014
Table Rock Lake	7313	NW NW22,22N22W		Stone	Nutrients		2014
West Fork Niangua River	1175	33,32N,18W	33,31N,18W	Webster	Low DO		2014

Willow Fork	955	36,45N,17W	29,45N,17W	Moniteau	Low DO		2014
Willow Fork, Tributary to	956	Mouth	27,45N,17W	Moniteau	Low DO	Tipton WWTP	2014
Belcher Branch Lake	7365	08/17,55N,34W		Buchanan	Mercury	Atmospheric Deposition	2015
Busch W.A. #35	7057	NE NE30,46N,03E		St. Charles	Mercury	Atmospheric Deposition	2015
Cedar Creek, Trib. To	743	Mouth	14,49N,11W	Callaway	Low DO		2015
Clearwater Lake	7326	NW NE06,28N,03E		Reynolds	Mercury	Atmospheric Deposition	2015
Current River	2636	State Line	24,31N,6W	Ripley, Shannon	Mercury	Atmospheric Deposition	2015
Dark Creek	690	Mouth	34,55N,15W	Randolph	Low DO		2015
Deer Ridge Community Lake	7015	18,62N,08W		Texas	Mercury	Atmospheric Deposition	2015
Eleven Point River	2597	18,24N,2W	36,25N,4W	Oregon	Mercury	Atmospheric Deposition	2015
Gasconade River	1455	Mouth	6,29N,14W	Gasconade	Mercury	Atmospheric Deposition	2015
Hough Park Lake	7388	19,44N,11W		Cole	Mercury	Atmospheric Deposition	2015
Knob Noster State Park Lakes (Lake Buteo)	7196	29/30/46N,24W		Johnson	Mercury	Atmospheric Deposition	2015
Mark Twain Lake	7033	26,55N,07W		Ralls	Mercury	Atmospheric Deposition	2015
McKay Park Lake (Sunset Lake)	7399	13,44N,12W		Cole	Mercury	Atmospheric Deposition	2015
Meramec River	1841	Big R.	Meramec State Pk.	Jefferson, Franklin	Mercury	Atmospheric Deposition	2015
Mississippi River	3152	State Line	Ohio R.	Pemiscot, Mississippi	Mercury	Atmospheric Deposition	2015
Noblett Lake	7316	25,26N,11W		Douglas	Mercury	Atmospheric Deposition	2015
Roubidoux Creek	1512	Mouth	25,36N,12W	Pulaski	Low DO		2015
Salt River	91	Hwy. 79	Re-Reg Dam	Pike, Ralls	Mercury	Atmospheric Deposition	2015
Schuman Park Lake	7280	02,37N,08W		Phelps	Mercury	Atmospheric Deposition	2015
St. Johns Ditch	3138	29,23N,15E	25,28N,13E	New Madrid, Scott	Mercury	Atmospheric Deposition	2015

St. Louis, Lake	7054	NE SW26,47N,02E		St. Charles	Mercury	Atmospheric Deposition	2015
Sugar Creek	686	Mouth	Sugar Cr. Lake Dam	Randolph	Low DO		2015
Whetstone Creek	1504	Mouth	21,29N,13W	Wright	Low DO	Rural NPS	2015
Wolf Creek	2879	Mouth	29,36N,6E	St. Francois	Low DO		2015
Wolf Creek, Trib. To	3589	Hwy. 32	Hwy. D	St. Francois	Low DO		2015
Woods, Lake of the	7436	NE,02,48N,12 W		Boone	Mercury	Atmospheric Deposition	2015
Big Otter Creek, Tributary to	1225	Mouth	32,40N,25W	Henry	Low DO		2016
Clear Creek	1333	7,37N,27W	10,35N,29W	St. Clair, Vernon	Low DO		2016
Clear Creek	1336	10,35N,29W	16,34N,30W	Vernon	Low DO		2016
Clear Fork	935	Mouth	35,45N,25W	Johnson	Low DO	Knob Noster WWTP	2016
Elm Branch	1283	Mouth	12,43N,24W	Henry	Low DO		2016
Little Drywood Creek	1325	Mouth	13,34N,32W	Vernon	Low DO		2016
Miami Creek	1299	Mouth	10,40N,32W	Bates	Low DO		2016
North Fork Cuivre River	170	24,51N,3W	28,52N,3W	Pike	Low DO		2016
Panther Creek	1373	Mouth	13,35N,24W	Polk, Hickory	Low DO		2016
Shoal Creek	3231	12,23N,29W	Hwy. 86	Barry	Low DO		2016
South Blackbird Creek	655	2,64N,17W	18,65N,18W	Putnam	Ammonia	Unknown	2016
South Fork Salt River	142	Audrain Co. Line	5,49N,4W	Audrain	Low DO		2016
Troublesome Creek	73	Mouth	15,59N,7W	Marion	Low DO		2016
West Fork Drywood Creek	1317	Mouth	State Line	Vernon	Low DO		2016
West Yellow Creek	599	14,61N,19W	14,63N,19W	Sullivan	Low DO		2016
Village Creek	2863	Mouth	5,33N,7E	Madison	Manganese		Delist

*Waterbodies on Memorandum of Understanding between MDNR and EPA.

1 DO: Dissolved Oxygen

2 AML: Abandoned Mine Land; WWTP: Wastewater Treatment Plant; NPS: Nonpoint Source